SHOUT
SHARE
IT

B
2571
K-10

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

EDITED BY

DR. G. CARMICHAEL LOW.

VOLUME LI.

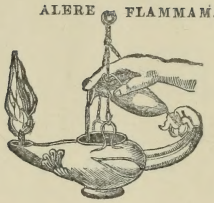
SESSION 1930–1931.

LONDON:

WITHERBY & CO., 326 HIGH HOLBORN.

1931.

ALERE FLAMMAM.



PRINTED BY TAYLOR AND FRANCIS,
RED LION COURT, FLEET STREET.

PREFACE.

During the past Session the number of attendances at the meetings of the Club was well maintained, 397 members and 102 guests having been present, a total of 499.

The chief event of the year was the presentation of the Godman-Salvin Medal to Mr. W. L. Sclater at the October dinner, which was held in conjunction with the British Ornithologists' Union. Sir John Rose Bradford, President of the Royal College of Physicians and Senior Vice-President of the British Ornithologists' Union, made the presentation.

Major Stanley S. Flower, the Chairman, chose for his annual address, (1) a Review of the Events of the Year, and (2) a Discourse on Nomenclature.

Dr. G. Carmichael Low gave an account of a visit to Canada and the United States. Mr. George Brown read a paper on "The Hill-migrating Birds of Ceylon," and Dr. P. H. Manson-Bahr one on "The Breeding Displays of certain Waders, with special reference to the Snipe Family," this being illustrated with lantern-slides. The Rev. F. C. R. Jourdain also gave an interesting account of a visit made to Palestine during the spring of 1931.

Comparatively few new forms were described, but some interesting ones were recorded by Lord Rothschild, by Mr. N. B. Kinnear (in conjunction with Mr. Hugh Whistler), by Mr. D. A. Bannerman, and by Dr. V. G. L. Van Someren. Mr. G. L. Bates also had a series from West Africa, and Mr. W. L. Sclater two new species from the Amani Forest, in the Usambara District of Tanganyika Territory, obtained by Mr. R. E. Moreau.

The Annual Dinner, held at the March meeting, in conjunction with the British Ornithologists' Union, was again a great success, and many members were present. Miss C. M. Acland showed photographs and Mrs. Seton Gordon and Captain H. A. Gilbert cinematograph films. The Club entertained as distinguished guests, during the course of the Session, Dr. Ernst Mayr and Professor Berlioz.

One records with deep regret the death of Mr. R. M. Hawker, a very old member of the Club, and of Mr. J. P. Norris, a recent one.

G. CARMICHAEL LOW,
Editor.

London, July 1931.

BRITISH ORNITHOLOGISTS' CLUB.

(Founded October 5, 1892.)

TITLE AND OBJECTS.

The objects of the Club, which shall be called the "British Ornithologists' Club," are the promotion of social intercourse between Members of the British Ornithologists' Union and to facilitate the publication of scientific information connected with ornithology.

RULES.

(*As amended, October* 8, 1930.)

Management.

I. The affairs of the Club shall be managed by a Committee, to consist of a Chairman, who shall be elected for three years, at the end of which period he shall not be eligible for re-election for the next term; a Vice-Chairman, who shall serve for one year, and who shall not be eligible for the next year; an Editor of the 'Bulletin,' who shall be elected for five years, at the end of which period he shall not be eligible for re-election for the next term; a Secretary and Treasurer, who shall be elected for a term of one year, but shall be eligible for re-election. There shall be in addition four other Members, the senior of whom shall retire each year, and another Member be elected in his place; every third year the two senior Members shall retire and two other Members be elected in their place. Officers and Members of the Committee shall be elected by the Members of the Club at a General Meeting, and the names of such Officers and Members of Committee nominated by the Committee for the ensuing year, shall be circulated with the notice convening the General Meeting, at least two weeks before the Meeting. Should any Member wish to propose another candidate, the nomination of such, signed by at least two Members, must reach the Secretary at least one clear week before the Annual General Meeting.

II. Any Member desiring to make a complaint of the manner in which the affairs of the Club are conducted, must communicate in writing with the Chairman, who will, if he deem fit, call a Committee Meeting to deal with the matter.

III. If the conduct of any Member shall be deemed by the Committee to be prejudicial to the interests of the Club, he may be requested by the Committee to withdraw from the Club. In the case of refusal, his name may be removed from the list of Members at a General Meeting, provided that, in the notice calling the Meeting, intimation of the proposed resolution to remove his name shall have been given, and that a majority of the Members voting at such Meeting record their votes for his removal.

A Member whose name has been removed shall forfeit all privileges of Membership and shall have no claim on the Club from the date of his removal.

Subscriptions.

IV. Any Member of the British Ornithologists' Union may become a Member of the Club on payment to the Treasurer of an entrance-fee of one pound and a subscription of one guinea for the current Session. On Membership of the Union ceasing, Membership of the Club also ceases.

Any Member who has not paid his subscription before the last Meeting of the Session, shall cease, *ipso facto*, to be a Member of the Club, but may be reinstated on payment of arrears.

Any Member who has resigned less than five years ago may be reinstated without payment of another Entrance Fee.

Any Member who resigns his Membership on going abroad may be readmitted without payment of a further Entrance Fee at the Committee's discretion.

Meetings.

V. The Club will meet, as a rule, on the second Wednesday in every month, from October to June inclusive, at such hour and place as may be arranged by the Committee, but should such Wednesday happen to be Ash Wednesday, the Meeting will take place on the Wednesday following. At these Meetings papers upon ornithological subjects will be read, specimens exhibited and described, and discussion invited.

VI. A General Meeting of the Club shall be held on the day of the October Meeting of each Session and the Treasurer shall present thereat the Balance-sheet and Report; and the election of Officers and Committee, in so far as their election is required, shall be held at such Meeting.

VII. A Special General Meeting may be called at the instance of the Committee, for any purpose which they deem to be of sufficient importance, or at the instance of not fewer than fifteen Members. Notice of not less than two weeks shall be given of every General and Special General Meeting.

Introduction of Visitors.

VIII. Members may introduce visitors at any ordinary Meeting of the Club, but the same guest shall not be eligible to attend on more than three occasions during the Session. No former Member, who has been removed for non-payment of subscription, or for any other cause, shall be allowed to attend as a guest.

'Bulletin' of the Club.

IX. An Abstract of the Proceedings of the Club shall be printed as soon as possible after each Meeting, under the title of the 'Bulletin of the British Ornithologists' Club' and shall be distributed gratis to every Member who has paid his subscription.

Contributors are entitled to six free copies of the 'Bulletin,' but if they desire to exercise this privilege, they must give notice to the Editor when their manuscript is handed in. Members purchasing extra copies of the 'Bulletin' are entitled to a rebate of 25 per cent. on the published price, but not more than two copies can be sold to any Member unless ordered before printing.

Descriptions of new species may be published in the 'Bulletin,' although such were not communicated at the Meeting of the Club. This shall be done at the discretion of the Editor and so long as the publication of the 'Bulletin' is not unduly delayed thereby.

Any person speaking at a Meeting of the Club shall be allowed subsequently—subject to the discretion of the Editor—to amplify his remarks in the 'Bulletin,' but no fresh matter shall be incorporated with such remarks.

X. No communication, the whole or any important part of which has already been published elsewhere, shall be eligible for publication in the 'Bulletin,' except at the discretion of the Editor; and no communication made to the Club may be subsequently published elsewhere without the written sanction of the Editor.

Alteration and Repeal of Rules.

XI. Any suggested alteration or repeal of a standing rule shall be submitted to Members to be voted upon at a General Meeting convened for that purpose.

COMMITTEE, 1930–1931.

Major S. S. Flower, *Chairman.* Elected 1930.
Lord Rothschild, *Vice-Chairman.* Elected 1930.
Dr. G. Carmichael Low, *Editor.* Elected 1930.
C. W. Mackworth-Praed, *Hon. Secretary and Treasurer.* Elected 1929.
B. W. Tucker. Elected 1928.
F. J. F. Barrington. Elected 1929.
Dr. P. Manson-Bahr. Elected 1930.
Dr. A. Landsborough Thomson. Elected 1930.

Officers of the British Ornithologists' Club, Past and Present.

Chairmen.

P. L. Sclater, F.R.S.	1892–1913.
Lord Rothschild, F.R.S.	1913–1918.
W. L. Sclater.	1918–1924.
H. F. Witherby.	1924–1927.
Dr. P. R. Lowe.	1927–1930.
Major S. S. Flower.	1930–

Vice-Chairman.

Lord Rothschild, F.R.S.	1930–1931.

Editors.

R. Bowdler Sharpe.	1892–1904.
W. R. Ogilvie-Grant.	1904–1914.
D. A. Bannerman.	1914–1915.
D. Seth-Smith.	1915–1920.
Dr. P. R. Lowe.	1920–1925.
N. B. Kinnear.	1925–1930.
Dr. G. Carmichael Low.	1930–

Honorary Secretaries and Treasurers.

Howard Saunders.	1892–1899.
W. E. de Winton.	1899–1904.
H. F. Witherby.	1904–1914.
Dr. P. R. Lowe.	1914–1915.
C. G. Talbot-Ponsonby.	1915–1918.
D. A. Bannerman.	1918–1919.
Dr. Philip Gosse.	1919–1920.
J. L. Bonhote.	1920–1922.
C. W. Mackworth-Praed.	1922–1923.
Dr. G. Carmichael Low.	1923–1929.
C. W. Mackworth-Praed.	1929–

LIST OF MEMBERS.

JUNE 1931.

Acland, Miss C. M.; Walwood, Banstead, Surrey.

Adams, Ernest E.; Lloyd's, Royal Exchange, E.C. 3.

Alexander, H. G.; 144 Oak Tree Lane, Selly Oak, Birmingham.

Alexander, W. B.; Dept. of Zoology, University Museum, Oxford.

Aplin, Oliver Vernon; Stonehill House, Bloxham, Banbury, Oxon.

Baily, W. Shore; Boyers House, Westbury, Wilts.

Baker, E. C. Stuart, J.P., F.Z.S., F.L.S.; 6 Harold Road, Upper Norwood, S.E. 19.

Bannerman, David A., M.B.E., B.A., F.R.S.E.; British Museum (Natural History), S.W. 7, and 7 Pembroke Gardens, Kensington, W. 8.

Barrington, Frederick J. F., M.S., F.R.C.S. (*Committee*); University College Hospital Medical School, Gower Street, W.C. 1.

Bates, G. L.; Blasford Hill, Little Waltham, Chelmsford, and Bitye Ebolowa, French Cameroons.

Best, Miss M. G. S.; 28 Paulton's Square, Chelsea, S.W. 3.

Blaauw, F. E., C.M.Z.S.; Gooilust, s'Graveland, Hilversum, Noord-Holland.

Blezard, Miss Ruth; Stock, Tring, Herts.

Boorman, S.; Heath Farm, Send, Woking, Surrey.

Booth, H. B.; "Ryhill," Ben Rhydding, Yorks.

Boyd, A. W.; Frandley House, near Northwich.

Bradford, A. D.; Garsten House, near Watford.

Bradford, Sir J. Rose, K.C.M.G., M.D., F.R.C.P., F.R.S.: 8 Manchester Square, W. 1.

Brown, George; Coombe Manor, Hungerford, Berks.

Browne, Patrick, R.E.; Firwood, Trumpington Road, Cambridge.

Bunyard, P. F., F.Z.S.; 57 Kidderminster Road, Croydon.

Butler, Arthur L.; St. Leonard's Park, Horsham, Sussex.

Buxton, Anthony; Knighton, Buckhurst Hill, Essex.

Chapman, F. M.; American Museum of Natural History, New York, U.S.A.

Charteris, Hon. G. L.; 24 Oxford Square, W. 1.

Chasen, Frederick N.; Raffles Museum, Singapore.

Cheesman, Major R. E., O.B.E.; E. India United Service Club, 16 St. James's Square, S.W. 1.

Clarke, Brig.-General Goland van Holt, C.M.G., D.S.O. F.Z.S.; Wiston Park, Steyning, Sussex.

Clarke, John P. Stephenson; Broadhurst Manor, Horsted Keynes, Sussex.

Clarke, Col. Stephenson Robert, C.B., F.Z.S.; Borde Hill, Cuckfield, Sussex.

Cleave, Henry P. O.; Mansfield House, Kendrick Road, Reading.

Cochrane, Captain Henry L., R.N. (Retd.); The Chase, Whaddon, Bletchley, Bucks.

Collier, Charles, F.Z.S.; Bridge House, Culmstock, Devon.

Cox, Major-Gen. Sir Percy Z., G.C.I.E., G.C.M.G., K.C.S.I.; 25 Kensington Palace Mansions, Kensington, W. 8.

Cunningham, Josias; Fernhill, Belfast.

Curtis, Frederick, F.R.C.S.; Alton House, Redhill, Surrey.

Deane, Robert H.; Seaford House Golf Club, Seaford, Sussex.

Delacour, M. Jean; Chateau de Cleres (Seine-Inf.), France.

Delmé-Radcliffe, Lieut.-Col. A., D.S.O.; Cypress Lodge, Bridge Street, Walton-on-Thames, Surrey.

Delmé-Radcliffe, Lieut.-Col. H., F.Z.S., F.R.G.S.; c/o Lloyds Bank (Cox & Co.'s Branch), F. Dept., 6 Pall Mall, S.W. 1.

Dewhurst, Captain F. W., Royal Marine L.I.; Elmwood, North End, Hampstead, N.W. 3.

Dobie, William Henry, M.R.C.S.; 2 Hunter Street, Chester.

Duncan, Arthur Bryce; Newlands, Dumfries.

Duncan, Walter Bryce; Newlands, Dumfries.

Ellis, H. Willoughby, F.Z.S., F.E.S.; Speldhurst Close, Sevenoaks, Kent.

Ellis, Ralph, Jr.; 2420 Ridge Road, Berkeley, California.

Evans, Arthur Humble, M.A., D.Sc., F.Z.S.; Cheviot House, Crowthorne, Berks.

Ezra, A., O.B.E., F.Z.S.; Foxwarren Park, Cobham, Surrey.

Ferrier, Miss Judith M.; Hemsby Hall, Suffolk.

Finlinson, Horace W., F.Z.S.; 50 St. Michaels Road, Bedford.

Fisher, Kenneth; School House, Oundle, Northamptonshire.

Fleming, James M.; Drumwalt, Long Road, Cambridge.

Flower, Major S. S. (*Chairman*); Spencersgreen End, Tring, Herts.

Foulkes-Roberts, Captain P. R.; Kwale, Warri Province, Nigeria, West Africa, and Westwood, Goring-on-Thames, Oxfordshire.

55 Glegg, W. E.; The House, Albion Brewery, Whitechapel Rd., E. 1.

Glenister, A. G.; c/o Messrs. Osborne & Chappel, Ipoh, Perak, Federated Malay States.

Goodall, J. M.; The Nest, Bembridge, Isle of Wight.

Graham, Lt. R. R., R.N.; H.M.S. 'Ganges,' Harwich.

Grant, Major C. H. B., F.Z.S.; Ujiji, Kigoma, Tanganyika Territory, E. Africa, *viâ* Dar-es-Salaam.

60 Grey of Fallodon, Viscount, K.G., P.C., F.Z.S.; Fallodon, Christon Bank, R.S.O., Northumberland.

Griffith, Arthur F.; 3 Evelyn Terrace, Brighton.

Gurney, G. H., F.Z.S.; Keswick Hall, Norwich, Norfolk.

Gyldenstolpe, Count Nils; Royal (Natural History) Museum, Stockholm, Sweden.

Hachisuka, The Hon. Masauji; Japanese Embassy, London, and Mita Shiba, Tokyo, Japan.

65 Haig Thomas, Mrs. Rose; 71 Strand on the Green, W. 4.

Haigh, George Henry Caton, F.Z.S.; Grimsby Hall, Great Grimsby, Lincolnshire.

Hale, Rev. James R., M.A.; Boxley Vicarage, Maidstone, Kent.

Hamerton, Colonel A. E.; 1 Park Village West, Regent's Park, N.W. 1.

Harrison, Bernard Guy; 45 St. Martin's Lane, W.C. 2.

70 Harrison, Dr. James M., D.S.C.; Bowerwood House, St. Botolph's Road, Sevenoaks, Kent.

Harrisson, Thomas H.; The Croft, Ongar Hill, Addlestone, Surrey.

Hartert, Ernst, Ph.D., F.Z.S.; 60*b* Albrechtstrasse, Berlin, Südende.

Heath, R. E.; 54 Brompton Square, S.W. 3.

Hett, Geoffrey Secombe, M.B., F.R.C.S., F.Z.S.; 86 Brook Street, Grosvenor Square, W. 1.

75 Hodgkin, Mrs. T. Edward; Old Ridley, Stocksfield, Northumberland.

Hope, R. F.; 29 Queen's Gate Terrace, S.W. 7.

Hopkinson, Emilius, C.M.G., D.S.O., M.B., F.Z.S.; Wynstay, Balcombe, Sussex.

Hordern, Miss Doreen; 267 St. James's Court, Buckingham Gate, S.W. 1.

Hutson, Capt. H. P. W., R.E.; c/o 40th (Fortress) Coy. R.E., Wellington Barracks, Hong Kong.

80 Inglis, C. McFarlane; Natural History Museum, Darjiling, India.

Ingram, Capt. Collingwood; The Grange, Benenden, Cranbrook, Kent.

Jabouille, Pierre; Hué, Annam, Indo-China.

Janson, Charles W.; 16 Wilton Crescent, S.W. 1.

Jordan, Dr. Karl; Zoological Museum, Tring, Herts.

85 Jourdain, Rev. F. C. R., M.A., H.F.A.O.U., H.M.S.O. de France; Whitekirk, 4 Belle Vue Road, Southbourne, Hants.

Kinnear, Norman B.; British Museum (Natural History), Cromwell Road, S.W. 7.

Kloss, C. Boden; Raffles Museum, Singapore, Straits Settlements, and Royal Societies Club, St. James's Street, S.W. 1.

Kuroda, Dr. Nagamichi; Fukuyoshi Cho, Akasaka, Tokyo, Japan.

La Touche, J. D.; Kiltymon, Newtownmountkennedy, Co. Wicklow, Ireland.

90 Laidlaw, Thomas Geddes; Halmyre, West Linton, Peeblesshire.

Leach, Miss E. P.; 17 Hereford Square, S.W. 7.

Lewis, John Spedan, F.Z.S.; North Hall, Mortimer Crescent, Greville Road, St. John's Wood, N.W. 6.

Lloyd, Bertram; 53 Parkhill Road, Hampstead, N.W. 3.

Low, George Carmichael, M.A., M.D., C.M., F.R.C.P., F.Z.S. (*Editor of the 'Bulletin'*); 86 Brook Street, Grosvenor Square, W. 1.

95 Lowe, P. R., O.B.E., B.A., M.B., B.C., F.Z.S. (*Chairman*, 1927–1930); British Museum (Natural History), Cromwell Road, S.W. 7.

Lucas, Nathaniel S., M.B., F.Z.S.; 19 Westbourne Terrace, Hyde Park, W. 2.

Lynes, Rear-Admiral Hubert, R.N., C.B., C.M.G.; 23 Onslow Gardens, S.W. 7.

Mackenzie, John M. D., B.A., C.M.Z.S.; Sidlaw Fur Farm, Tullachard, Balbeggie, Perthshire.

McKittrick, T. H., Jr.; 80 Lombard Street, E.C. 3.

100 Mackworth-Praed, C. W., F.Z.S. (*Hon. Sec. & Treasurer*); 51 Onslow Gardens, S.W. 7.

Macmillan, Captain W. E. F.; 42 Onslow Square, S.W. 7.

McNeile, J. H.; Guards' Club, Brook Street, W. 1.

Magrath, Lieut.-Colonel H. A. F.; 43 Grosvenor Road, Westminster, S.W. 1.

Manson-Bahr, P. H., D.S.O., M.A., M.D., F.R.C.P., F.Z.S. (*Committee*); 9 Weymouth Street, W. 1.

105 Mathews, G. M., F.L.S., F.Z.S.; Meadway, St. Cross, Winchester, Hants.

May, W. Norman, M.D.; The White House, Sonning, Berks.

Mayaud, Noel; 1 Rue de Bordeaux, Saumur, France.

Meade-Waldo, E. G. B., F.Z.S.; Stonewall Park, Edenbridge, Kent.

Meiklejohn, Arnold H.; 15 Ox Lane, Harpenden, Herts.

Meinertzhagen, Colonel R., D.S.O., F.Z.S.; 17 Kensington Park Gardens, W. 8.

Micholls, Mrs. Dorothy; Silver Birches, Wentworth, Virginia Water.

Momiyama, Toku Taro; 1146 Sasazka, Yoyohata-mati, Tokyo, Japan.

Munn, P. W.; Puerto Alcudia, Majorca, Balearic Isles, Spain.

Murton, Mrs. C. D.; Cranbrook Lodge, Cranbrook, Kent.

Musters, James Lawrence Chaworth; Royal Societies Club, St. James's Street, S.W. 1.

Naumburg, Mrs. W. W.; 121 East 64th Street, New York.

Newman, T. H., F.Z.S.; Verulam, 46 Forty Avenue, Wembley Park, Middlesex.

Oldham, Chas., F.Z.S.; The Bollin, Shrublands Road, Berkhamsted, Herts.

Osmaston, Bertram Beresford; 116 Banbury Road, Oxford.

Parkin, Thomas, M.A., F.L.S., F.Z.S.; Fairseat, High Wickham, Hastings.

Penrose, Francis G., M.D., F.Z.S.; Rathkeale, 51 Surrey Road, Bournemouth.

Pershouse, Major S.; c/o Lloyds Bank (Cox & King's Branch), 6 Pall Mall, S.W. 1.

Pitman, Capt. C. R. S., D.S.O., M.C., Game Warden, Entebbe, Uganda; c/o C. E. Pitman, C.I.E., Greystoke, Dawlish, Devon.

Player, W. J. P.; Wernfadog, Clydach R.S.O., Glamorganshire.

Popham, Hugh Leyborne, M.A.; Houndstreet House, Pensford, Somerset.

Ratcliff, F. R.; 29 Connaught Square, W. 2.

Rickett, C. B., F.Z.S.; 27 Kendrick Road, Reading, Berks.

Rivière, B. B., F.R.C.S.; Hill House, Saxlingham, Norwich.

Rothschild, Lionel Walter—Lord, D.Sc., F.R.S., Ph.D., F.Z.S. (*Vice-Chairman*) (*Chairman*, 1913–1918); Tring Park, Herts.

Sclater, William Lutley, M.A., F.Z.S. (*Chairman*, 1918–1924); 10 Sloane Court, S.W. 1.

Scone, The Rt. Hon. Mungo David—Lord; Scone Palace, Perth.

Seth-Smith, David, F.Z.S.; Curator's House, Zoological Gardens, Regent's Park, N.W. 8.

Shipton, Wm., B.A., M.D.; 2 The Square, Buxton.

Simonds, Major Maurice H., Fines Baylewick, Binfield, Berks.

135 Sladen, Major A. G. L., M.C.; Kingswood House, The Lee, Great Missenden, Bucks.

Smalley, Frederick W., F.Z.S., Uppleby House, Parkstone, Dorset.

Snouckaert van Schauburg, Baron Rene Charles; Hôtel les Terrasses, Territet, Switzerland.

Sparrow, Col. R., C.M.G., D.S.O., F.Z.S., F.R.G.S.; The Lodge, Colne Engaine, Earls Colne, Essex.

Stares, J. W. C.; Portchester, Hants.

140 Stevens, Herbert; Clovelly, Beaconsfield Road, Tring, Herts.

Stoneham, Captain H. F., O.B.E., F.E.S.; The East Surrey Demesne, P.O. Charangani, Trans-Nzoia, Kenya Colony, British East Africa.

Stuart-Menteth, W. G.; Bransfield, Godstone, Surrey.

Styan, F. W., F.Z.S.; Stone Street, near Sevenoaks.

Swynnerton, C. F. Massy; Poste Restante, Dar-es-Salaam, Tanganyika Territory, East Africa.

145 Taka-Tsukasa, Prince Nobusuke; 1732 Kamimeguro, Meguro, Tokyo, Japan.

Talbot-Ponsonby, C. G.; 5 Crown Office Row, Temple, E.C. 4.

Tavistock, Hastings William Sackville, Marquis of, F.Z.S.; Warblington House, Havant.

Thomson, A. Landsborough, O.B.E., D.Sc. (*Committee*); 9 Addison Gardens, W. 14.

Thorpe, W. H., M.A., Ph.D.; Imperial Bureau of Entomology, Farnham House Laboratory, Farnham Royal, Bucks.

150 Ticehurst, Claud B., M.A., M.D.; Saxon House, Appledore, Kent.

Ticehurst, N. F., O.B.E., M.A., M.B., F.R.C.S., F.Z.S.; 24 Pevensey Road, St. Leonards-on-Sea.

Tucker, B. W., B.A., F.Z.S. (*Committee*); 9 Marston Ferry Road, Oxford.

Turner, Miss E. L., F.Z.S.; The Half Way Cottage, 13 Storey's Way, Cambridge.

Turtle, Lancelot J.; Rosemount, Knock, Belfast.

155 Tyrwhitt-Drake, Hugh G., F.Z.S.; Cobtree Manor, Sandling, Maidstone.

Urquhart, Capt. Alastair, D.S.O., Latimer Cottage, Latimer, Chesham, Bucks.

Van Someren, Dr. V. G. L.; East Africa and Uganda Natural History Society, Coryndon Memorial Museum, Nairobi, Kenya Colony, East Africa.

Vernay, A. S.; 51 Berkeley Square, W. 1.

Waite, Herbert William; c/o Messrs. Grindlay & Co., Ltd., Bombay.

160 Wallis, H. M.; 110 Kendrick Road, Reading.

Ware, R.; Leafwood, Frant, Tunbridge Wells.

Whistler, Hugh, F.Z.S., F.L.S.; Caldbec House, Battle, Sussex.

Whitaker, Joseph I. S., F.Z.S.; Malfitano, Palermo, Sicily.

White, S. J., F.Z.S.; 17 Philpot Lane, E.C. 3

165 Whitley, H.; Primley, Paignton, S. Devon.

Whymper, Samuel Leigh; Oriental Club, Hanover Square, W. 1.

Williams, Victor Owen; 6 Crown Office Row, Temple, E.C. 4.

Williamson, Sir W. J. F., C.M.G., F.Z.S.; c/o Lloyds Bank, 6 Pall Mall, S.W. 1.

Wing, J. Sladen; 21 Cheyne Gardens, Chelsea Embankment, S.W. 3.

170 Witherby, Harry F., M.B.E., F.Z.S. (*Chairman*, 1924–1927); 326 High Holborn, W.C. 1.

Witherington, G.; Sumner Plat, Hayward's Heath.

Wood, Dr. Casey A., M.D.; c/o The Library of Ornithology, McGill University, Montreal, Canada.

Wood, C. R.; c/o Messrs. Martins, Ltd. (marked "Personal"), 54 Sussex Place, South Kensington, S.W. 7.

Workman, William Hughes, F.Z.S.; Lismore, Windsor, Belfast.

175 Worms, Charles de; Milton Park, Egham, Surrey.

New Members for the Session .. 9
Total number of Members 175

NOTICE.

[Members are specially requested to keep the Hon. Secretary informed of any changes in their addresses, and those residing abroad should give early notification of coming home on leave.]

LIST OF AUTHORS

AND OTHER PERSONS REFERRED TO.

Page

ACCOUNTS, STATEMENT OF 3

ACLAND, Miss C. M.

Observations on the Smew (*Mergellus albellus*) in Glamorgan. 73

Remarks and photographic slides of some of the rarer British birds: *Pandion haliætus haliætus, Milvus milvus milvus, Cygnus bewickii, Platalea leucorodia leucorodia, Recurvirostra avosetta, Himantopus himantopus himantopus,* and *Ciconia ciconia ciconia* 78

Note on the Peregrine Falcon (*Falco peregrinus*) 105

ANNUAL DINNER OF THE BRITISH ORNITHOLOGISTS' UNION.. 77

ANNUAL GENERAL MEETING 2

BAILY, W. SHORE.

Exhibition of eggs of Peale's Falcon (*Falco peregrinus pealei*), the Wandering Tattler (*Tringa inca*), the Rhinoceros Auklet (*Cerorhinca monocerata*), the Ancient Murrelet (*Synthliboramphus antiquus*), the Marbled Murrelet (*Brachyramphus marmoratus*), and Cassin's Auklet (*Ptychoramphus aleuticus*). 72

BAKER, E. C. STUART.

Exhibition of eggs of the Greenshank (*Tringa nebularia*) and the Jack Snipe (*Lymnocryptes minimus*)..... 45

Remarks and descriptions of two new subspecies of *Caprimulgus monticolus*..... 100

BANNERMAN, D. A.

Description of a new race of the Chestnut-winged Pratincole (*Glareola pratincola boweni*)..... 28

Page

Bannerman, D. A. (*cont.*).

Description of a new race of the Little Tern (*Sterna albifrons guineæ*) 70

Descriptions of a new race of the Rosy-grey Dove (*Streptopelia roseogrisea bornuensis*) from Nigeria, and of the Laughing-Dove (*Stigmatopelia senegalensis thomé*) from the Gulf of Guinea 114

Remarks on the Rock-Pigeons from the Azores and Madeira, and a description of a new race, *Columba livia atlantis*, from the Azores 115

Exhibition of a mounted specimen of the São Thomé Maroon Pigeon (*Columba arquatrix thomensis*) 123

Description of a new race of an Akalat (*Sheppardia cyornithopsis houghtoni*) 128

—— and Jourdain, Rev. F. C. R.

Congratulations to Mr. Boughton-Leigh on the value of his egg-collection from Nigeria 124

Bates, G. L.

Descriptions of twelve new birds from West Africa, viz.: *Mirafra africana henrici, Anthus richardi bannermani, Ptyonoprogne obsoleta birwæ, Hirundo daurica disjuncta, Malacocincla rufipennis extrema, Cisticola emini admiralis, Prinia leontica, Saxicola torquata nebularum, Andropadus curvirostris leoninus, Cinnyris* (*Cyanomitra*) *olivaceus cephaëlis, Cinnyris cyanolæmus magnirostratus, Estrilda astrild kempi* 47

Booth, H. B.

A misunderstanding of Dr. P. R. Lowe's remarks on a hybrid example of a cross between *Lagopus scoticus* and *Tetrao tetrix* which he exhibited at the December meeting .. 117

Boughton-Leigh, P.

Exhibition of various clutches of eggs from Nigeria:— *Necrosyrtes monachus monachus, Accipiter badius sphenurus, Gymnogenys typicus pectoralis, Ptilostomus afer*, and *Ploceus cucullatus*, etc.—the eggs of several of these hitherto undescribed 123

Brown, G.

A paper entitled "Notes on the Hill-migrating Birds of Ceylon" 20

Page

BUNYARD, P. F.

Exhibition of eggs of *Tringa melanoleuca*, *Tringa nebularia*, and *Tringa totanus totanus* 9

Exhibition of three eggs of Bonaparte's Gull (*Larus philadelphia*) 11

Exhibition of a clutch of eight eggs of the Great Tit (*Parus major newtoni*) 25

Exhibition of five clutches of five eggs of the Rock-Pipit (*Anthus petrosus*) 60

Paper on the "Identification of the Eggs of the Limicolæ." 74

A communication on the occurrence of the Great Skua (*Catharacta skua*) at Waterloo Bridge 104

Exhibition and remarks upon a large series of eggs of the Snow-Bunting (*Plectrophenax nivalis*) from Greenland and Iceland..... 112

BUTLER, A. L.

Exhibition of a mounted Woodcock (*Scolopax rusticola rusticola*) in full nuptial display 99

Remarks upon a supposed new species of the Standard-wing Nightjar (*Macrodipteryx longipennis*) 124

CHAIRMAN'S ANNUAL ADDRESS 32

CHARTERIS, The Hon. GUY.

Exhibition of a stuffed specimen of the Jackdaw (*Colœus monedula*) 62

CLEAVE, H. P. O.

Observations on the Smew (*Mergellus albellus*)..... 60

A note on the Crossbill (*Loxia curvirostra curvirostra*) occurring in Berkshire 106

COMMITTEE FOR 1930–1931..... 4

CORRIGENDA 129

DELACOUR, J.

An account of the Franco-British-American Expedition to Madagascar..... 45

Exhibition of a male of *Oriolus mellianus* 46

A note on Dr. Hartert's and M. Lavauden's remarks on two Madagascar birds, *Thamnornis chloropetoides* and *Nesillas typica* 70

Page

DELACOUR, J. (*cont.*).

Correction to the specimens collected in Madagascar of *Thamnornis chloropetoides* 82

FINANCIAL STATEMENT 3

FLOWER, Major STANLEY S.

Chairman's Annual Address 32

GILBERT, Captain H. A.

Demonstration of a film by Mr. Arthur Brook of the Golden Eagle (*Aquila chrysaëtos chrysaëtos*), and some photographs of White Herons (*Egretta alba alba*), Storks (*Ciconia ciconia ciconia*), and other birds from Hungary 79

GODMAN-SALVIN MEDAL PRESENTED TO Mr. W. L. SCLATER. 4

GORDON, Mrs. SETON.

Exhibition of a film of Seals and Sea-Birds in the Outer Hebrides 79

GRANT, Major C. H. B.

Notes on the Angolan Swallow (*Hirundo angolensis angolensis*) and the Grey-headed Gull (*Hydrocolœus cirrocephalus phœocephalus*) 56

Observations on the distribution of *Pternistis leucoscepus infuscatus*; also a correction to a locality occurring on p. 57. 103

Further note on the Angolan Swallow (*Hirundo angolensis angolensis*) 126

Note on the Common Teal (*Anas crecca*) 127

HACHISUKA, The Hon. M.

Exhibition of *Phasianus* mut. *tenebrosus* 46

Exhibition of a drawing of an albino Ground-Pigeon (*Gallicolumba criniger*) 47

HALE, Rev. J. H.

Exhibition of a painting of four erythristic eggs of the Lapwing (*Vanellus vanellus*) 62

HARTERT, Dr. E., and LAVAUDEN, Mons. L.

Notes on *Thamnornis chloropetoides*, and description of a new race, *Nesillas typica monticola* 56

Page

JORDAN, Dr. KARL.

Exhibition of the stomach-contents of a pair of Great Crested Grebe (*Podiceps cristatus cristatus*) 108

——. *See* ROTHSCHILD, Lord.

JOURDAIN, Rev. F. C. R.

Comment on Mr. P. F. Bunyard's paper (on p. 9)..... 12

Remarks on Lord Rothschild's exhibition of a series of Pochard (*Fuligula ferina*)..... 25

Remarks on Mr. P. F. Bunyard's exhibit of eggs of the Rock-Pipit (*Anthus petrosus*) 61

Remarks on the Chairman's Address in relation to the adding of initials to the name of the authority for the specific name 62

Remarks on erythrism in the eggs of Alaudidæ 73

Exhibition of lantern-slides of the scenery of the Balearic Islands and Cyprus; also slides of a colony of Spoonbills (*Platalea leucorodia leucorodia*) in North Holland..... 80

An ornithological account of a recent visit to Palestine and Syria..... 120

Remarks on Dr. P. Manson-Bahr's paper (p. 88) on the description of the courtship of the Ruff (*Philomachus pugnax*). 126

Remarks on Mr. P. F. Bunyard's paper (pp. 112–114) giving the measurements of the Greenland and Iceland Snow-Bunting (*Plectrophenax nivalis subnivalis* and *P. n. insulæ*).. 126

——. *See* BANNERMAN, D.A.

KINNEAR, N. B.

Exhibition (on behalf of Mr. F. Ludlow) of a single egg of Biddulph's Ground-Chough (*Podoces biddulphi*) 61

—— and WHISTLER, H.

Descriptions of two new subspecies of Indian Tree-Pie (*Dendrocitta rufa vernayi* and *Dendrocitta formosæ sarkari*).. 17

Description of a new subspecies of Nuthatch (*Sitta castaneoventris almoræ*) 27

LAVAUDEN, Mons. L. *See* HARTERT, Dr. E.

LITERATURE, LIST OF (referred to at Annual Address) 40

LÖW, Dr. G. CARMICHAEL.

Election of, as Editor 2

Page

Low, Dr. G. Carmichael (*cont.*).

An account of a visit to Canada and the United States .. 12

Note on the genus *Calidris* 26

Note on rare Grebes and other birds in the London District, during December..... 43

Observations on the Smew (*Mergellus albellus*) in the London District..... 59

Observations on the Great Skua (*Catharacta skua*) in Middlesex 74

Observations upon the occurrence of Bewick's Swan (*Cygnus bewickii*) in outer London 81

Lowe, Dr. Percy R.

Exhibition of a hybrid example between *Lagopus scoticus* and *Tetrao tetrix*..... 42

Manson-Bahr, Dr. P. H.

A paper entitled "On the breeding displays of certain Waders, with special reference to the Snipe Family," illustrated by lantern slides 84

Exhibition of a female Senegal Yellow-fronted Canary (*Serinus mozambicus caniceps*) which had been in captivity twenty years 99

Exhibition of a new apparatus for showing stereoscopic photographs of birds to the best advantage 100

Mathews, Gregory M.

Descriptions of two new subspecies: *Myiomoira macrocephala enderbyi* and *Phœbastria nigripes reischekia* 29

Exhibition of a sparrow-pot, a vase-shaped vessel of red earthenware..... 57

Comments on Opinion No. 115 rendered by the International Commission on Zoological Nomenclature 66

Description of a new subspecies of the Pectoral Rail (*Hypotænidia philippensis norfolkensis*) 129

Mayr, Dr. E.

Descriptions of two new subspecies, *Ptiloprora plumbea granti* and *Pachycephalopsis hattamensis axillaris*, from the Snow Mountains of New Guinea 59

Members, List of xi

Page

Obituary.

J. P. Norris iv

Edward Bidwell, Richard Macdonell Hawker, Charles Edward Pearson 32

Officers of the Club, past and present ix

Oldham, Charles.

Remarks upon, and reference to, Dr. G. Carmichael Low's observations on rare Grebes 45

Remarks on Mr. Hachisuka's exhibited drawing of *Gallicolumba criniger* 47

Exhibition of a sparrow-pot similar to Mr. G. M. Mathews's exhibit 58

Osmaston, B. B., and Thomson, Dr. Landsborough.

Discussion on Mr. G. Brown's paper on the "Hill-migrating Birds of Ceylon" ..... 24 & 25

Presentation to Mr. W. L. Sclater of the Godman-Salvin Medal 4

Rothschild, Lord.

Election of, as Vice-Chairman 2

Exhibition of eggs of the Paradise-Crow (*Lycocorax pyrrhopterus pyrrhopterus*) and *Phonygammus keraudrenii keraudrenii* 9

Exhibition of a series of male Pochards (*Fuligula ferina*) . 25

Description of a new subspecies, *Trugon terrestris mayri*.. 69

Exhibition of a pair of American Wigeon (*Mareca americana*) from North Uist 99

Description of a new subspecies of Lark (*Æthocorys personata intensa*) 100

—— and Jordan, Dr. Karl.

Remarks on Mr. Mathews's comment (p. 66) on Opinion No. 115 given by the International Commission on Zoological Nomenclature 68

Rules, Title and Objects of the Club v

Page

Sclater, W. L.

Presentation to, of the Godman-Salvin Medal 4

Description of a new race of Barbet (*Viridibucco coryphæa jacksoni*) from Uganda 16

Descriptions of three new birds from Tanganyika Territory: *Apalis moreaui, Chlorophoneus nigrescens,* and *Dioptrornis fischeri amani* 109

Notes on Major Grant's birds recently received at the British Museum (Natural History)—*Guttera edouardi granti,* etc. 127

Seth-Smith, D.

Exhibitions of photographs of the Australian Bustard (*Choriotis australis australis*) and the Great Bustard (*Otis tarda tarda*) in full breeding display 99

Sladen, Major A. G. L.

Remarks on the clutch of eggs of the Great Tit (*Parus major newtoni*) exhibited by P. F. Bunyard 26

Observations on the Smew (*Mergellus albellus*) 60

Stegmann, Dr. B.

Further remarks on Dr. Ticehurst's note in the February 'Bulletin' (p. 71) on the correct name of *Strix willkouskii* .. 117

Thomson, Dr. Landsborough. *See* Osmaston, B. B.

Ticehurst, Dr. C. B.

Exhibition of young in down of the Knot (*Calidris canutus*) and other Waders 5

Remarks on the correct name of *Emberiza sordida* and *Strix willkouskii* 71

Remarks on the proposed new name for the Hawk-Eagles, *Limnaëtops* for *Nisaëtus* 81

Van Someren, Dr. V. G. L.

Description of a new subspecies of the Narina Trogon (*Apaloderma narina narina*) from Kenya Colony 80

Wallis, H. M.

Exhibition of a copy of the Bulgarian 'British Review,' containing an account of King Boris the Third as a naturalist 45

Page

Wallis, H. M. (*cont.*).

Exhibition of a nest of the Purple Sunbird (*Leptocoma asiatica asiatica*) 129

Whistler, H. *See* Kinnear, N. B.

Witherby, H. F.

A further note on the American Wigeon (*Mareca americana*) in reference to Lord Rothschild's statement at the April meeting (p. 99) 108

PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCXLIV.

The three-hundred-and-thirty-ninth Meeting of the Club was held at Pagani's Restaurant, 42–48 Great Portland Street, W. 1, on Wednesday, October 8, 1930.

Chairman : Major S. S. Flower.

Members of the B. O. C. present :—Miss C. M. Acland ; W. Shore Baily ; E. C. Stuart Baker ; D. A. Bannerman ; F. J. F. Barrington ; Miss M. G. S. Best ; S. Boorman ; Sir J. Rose Bradford ; G. Brown ; P. F. Bunyard ; J. Delacour ; A. H. Evans ; A. Ezra ; Miss J. M. Ferrier ; Lt. R. R. Graham, R.N. ; M. Hachisuka ; Rev. J. R. Hale ; Col. A. E. Hamerton ; B. G. Harrison ; R. E. Heath ; Dr. E. Hopkinson ; Rev. F. C. R. Jourdain ; N. B. Kinnear ; Dr. G. Carmichael Low (*Editor*) ; N. S. Lucas ; C. W. Mackworth-Praed (*Hon. Sec. & Treas.*) ; Lt.-Col. H. A. F. Magrath ; Dr. P. Manson-Bahr ; G. M. Mathews ; T. H. Newman ; C. Oldham ; Capt. C. R. S. Pitman ; H. L. Popham ; F. R. Ratcliff ; C. B. Rickett ; Lord Rothschild ; D. Seth-Smith ; Major M. H. Simonds ; Major A. G. L. Sladen ; Dr. A. Landsborough Thomson ; Dr. C. B. Ticehurst ; Miss E. L. Turner ; H. M. Wallis ; H. F. Witherby ; C. R. Wood ; C. de Worms.

Members of the B. O. U. :—Sir G. F. Archer ; C. F. Belcher ; N. G. Brownrigg ; H. P. O. Cleave ; Miss E. M. Godman ; Miss D. Hordern ; Bertram Lloyd ; Willoughby P. Lowe ; T. W. Proger ; Capt. L. R. Waud.

Guests :—W. L. Sclater ; Mrs. Sclater.

C. E. Demberley ; J. P. Dyson ; H. A. Evans ; Miss C. E. Godman ; J. P. R. Hale ; H. Harkness ; Dr. K. Jordan.

Annual General Meeting.

This was held at Pagani's Restaurant, Great Portland Street, immediately preceding the Dinner. Mr. T. H. Newman took the Chair, in the absence of Dr. P. R. Lowe. The Minutes of the last Annual Meeting were read and confirmed. The Treasurer, Mr. C. W. Mackworth-Praed, presented the Balance Sheet for the year, which showed continued prosperity. The Balance Sheet was duly passed.

The Annual Report was then presented by the Honorary Secretary. The number of Members showed very little change. The following Members had resigned :—Mr. T. G. Longstaff, D. W. Musselwhite, A. E. Price, and G. Pye-Smith. One member was removed under Rule iv. The Hon. Sec. regretted to announce the following deaths :—R. M. Hawker, J. B. Nichols, C. E. Pearson, R. H. Read. There were 10 new members.

Major S. S. Flower was elected Chairman in place of Dr. P. R. Lowe, who had completed his term of office, and Lord Rothschild was elected Vice-Chairman. This was a new office, and necessitated a slight alteration in the Rules which was passed unanimously, namely, the following insertion after the first sentence of Rule I. :—" A Vice-Chairman who shall serve for one year, and who shall not be eligible for the next year."

Dr. G. Carmichael Low was elected Editor in place of Mr. N. B. Kinnear, whose period of office had terminated. Mr. Sclater proposed and Mr. Bannerman seconded a vote of thanks to the retiring Editor for his five years' service. This was carried unanimously.

BRITISH ORNITHOLOGISTS' CLUB.

Twelve months' Financial Statement, 1st September, 1929, to 31st August, 1930.

12 m'ths ended 31 Aug. 1929.									12 m'ths ended 31 Aug. 1929.								
£	s.	d.		£	s.	d.	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.
			To Balance in Hand, 1st September, 1929:—										By Printing and Distribution of						
41	9	8	Cash at Bank, Current a/c	114	13	4				107	6	6	Publications and 'Bulletin'				103	6	8
473	17	3	do. Deposit a/c	487	7	5				14	0	0	,, Hire of Lantern for Annual Dinner with B. O. U.				15	12	0
3	18	11	In Hands of Treasurer ...	1	6	11							,, Thomas Wells for compiling and arranging Index to						
							603	7	8	5	5	0	'Bulletin' B.O.C.1. 1929–30				6	4	0
			,, Entrance Fees of 8 New Subscribers	8	0	0							,, Contribution to Zoological						
8	0	0								11	5	0	Society Record				11	5	0
185	17	0	,, Subscriptions—174 Members	182	14	0							,, Miscellaneous Expenses, including Audit Fee, Printing,						
			,, do. 1928–1929 ...	2	2	0				13	2	2	Stationery and Postages ...				22	1	1
							192	16	0										
27	13	4	,, Sales of 'Bulletin'				40	6	8	150	18	8	Total Payments				158	18	9
13	10	2	,, Bank Interest				20	2	2				,, Balance in Hand, 31st August, 1930:—						
										114	13	4	Cash at Bank, Current a/c	82	12	11			
										487	7	5	do. Deposit a/c	614	13	9			
										1	6	11	In Hands of Treasurer ...		17	1			
																	698	3	9
£754	6	4					£856	12	6	£754	6	4					£856	12	6

C. W. MACKWORTH-PRAED, *Treasurer.*

We have compared the foregoing Statement with the books and vouchers of the British Ornithologists' Club for the year ended 31 August, 1930, and certify same to be in accordance therewith. We have also verified the Cash at Bank.

23 Queen Victoria Street,
London, E.C. 4.
1st *September*, 1930.

W. B. KEEN & CO.,
Chartered Accountants.

Dr. P. Manson-Bahr and Dr. A. Landsborough Thomson were elected members of the Committee in place of Messrs. A. L. Butler and T. H. Newman, retiring through seniority.

Mr. Newman thereupon vacated the Chair and Major S. S. Flower took his place.

The following additions to Rule iv. were passed:—"Any Member who has resigned less than 5 years ago may be reinstated without payment of another Entrance Fee," and "Any Member who resigns his Membership on going abroad may be readmitted without payment of a further Entrance Fee at the Committee's discretion."

Committee, 1930–1931.

Major S. S. Flower, *Chairman* (elected 1930).
Lord Rothschild, *Vice-Chairman* (elected 1930).
Dr. G. Carmichael Low, *Editor* (elected 1930).
C. W. Mackworth-Praed, *Hon. Sec. & Treas.* (elected 1929).
B. W. Tucker (elected 1928).
F. J. F. Barrington (elected 1929).
Dr. P. Manson-Bahr (elected 1930).
Dr. A. Landsborough Thomson (elected 1930).

Presentation of the Godman-Salvin Medal to William Lutley Sclater, Esq.

Immediately after the Dinner, which the Committee of the B. O. C. had kindly consented to throw open to all Members of the British Ornithologists' Union, the President of the Union, Mr. William Lutley Sclater, was presented with the Godman-Salvin Medal in appreciation of the services he had rendered to Ornithology and on the termination of his 18 years' editorship of 'The Ibis.' Sir John Rose Bradford, K.C.M.G., C.B., C.B.E., M.D., President of the Royal College of Physicians and the Senior Vice-President of the British Ornithologists' Union, made the presentation. In an ably worded speech he pointed out the great part Mr. Sclater and his father had played in Natural History, especially in Ornithology. Mr. P. L. Sclater had been Chairman of the Club from 1892 to 1913, and Mr. W. L. Sclater from 1918 to 1924,

while the latter was now President of the British Ornithologists' Union, the highest distinction an ornithologist could attain to in this country. He also referred to the valuable services rendered in the long Editorship of 'The Ibis,' to the work contained in the 'Systema Avium Æthiopicarum,' and to some of his many other publications. He, finally, drew attention to Mr. Sclater's high qualities as a man, to his courtesy and charm, and to his kindness in helping young ornithologists. The Medal was then presented and the recipient's health was drunk with acclamation by the large audience present.

After the presentation Mr. Sclater replied, and expressed his sense of the very great honour which had been bestowed upon him by the presentation of the Godman-Salvin medal by the British Ornithologists' Club. He also wished to thank Sir John Rose Bradford for his very kind and flattering speech, and especially for what he had said about his father, the late Dr. P. L. Sclater, who was one of the founders of the Union and the first Editor of 'The Ibis.' He added that the work of editing 'The Ibis,' although it was a heavy one and had occupied a great portion of his time, was a labour of love and had given him a great deal of happiness. Though he was sorry to give it up, he felt very strongly that eighteen years were quite long enough for any man to hold so responsible a position, and that fresh ideas and new methods were necessary if 'The Ibis' was to retain its old prestige. He also wished to thank his many contributors, both members of the Union and others, for their cordial support and help in the work, and offered his successor, Dr. C. B. Ticehurst, his warmest wishes for the future of 'The Ibis' during the coming years.

This makes the third presentation of the Godman-Salvin Medal, the former recipients being Dr. William Eagle Clarke, President of the British Ornithologists' Union from 1918 to 1921, in 1922 and Dr. Ernst Hartert in 1929.

Dr. C. B. Ticehurst exhibited the young in down of the Knot (*Calidris canutus*) and other waders, and made the following remarks :—

This specimen of the Knot was taken on Reindeer Peninsula, Spitzbergen, on July 13, 1930, by Mr. Ingram. The

breeding-place of the Knot was first discovered by the late Col. Fielden in Baffin Land in 1876, and the chicks then secured form one of the groups in the gallery of the Natural History Museum. Since then the Knot has been found breeding in very few places.

In exhibiting this species I thought it might be of interest to bring up the chicks of several other waders for comparison (taken from my collection and from the Dresser Collection at Manchester), including the Sanderling, lent me by Mr. Kinnear. In my opinion the study of the young in down is a very important part of systematic ornithology, as it may be expected that in this stage affinities between species and groups of species will be seen which later on perhaps are not so evident.

Taking first the genus *Erolia* (*E. minutilla*, *minuta*, *temmincki*, *alpina*, *maritima*) it will be seen that there is a very general resemblance in the down plumage of all, yet each species is distinct. In this Eroline type the dorsal surface is variegated rufous, black, and buff with the lower dorsum "*ticked*" *with terminal white or pale buff points*. A dark loral streak to the eye, and *below it a shorter streak* (barely seen, however, in *temmincki*). The hind neck is whitish.

To come to details between each species, *minuta* and *minutilla* are very alike, the former has the rufous colour richer and is more rufescent on the head. The pattern etc. in *temmincki* is the same, but here the rufous colour is replaced by pale yellowish buff, so that this chick is very distinct. Only in small details does *alpina* differ from *minutilla* (apart from size), while *maritima* more resembles *minuta*, but is whiter on the buff parts of the pattern, also round the head, crown ,and on the underparts. One might say that in essential characters the Knot is almost Eroline, the white "points" are greyish white and do not "catch the eye" so markedly as in the others ; the rufous in the pattern gives way to greyish buff. The stout tarsi and feet and the proportionately thicker bill of the species are noticeable even at this early age.

The two Phalarope chicks, *fulicarius* and *lobatus*, are very alike, the rufous and black markings have the same distribution

in each, the rufous colour in *lobatus* is more golden, and it has a richer darker throat than is the case with *fulicarius*. The white "points" of *Erolia* are absent, and I think you will agree on down plumage alone *Phalaropus* is well differentiated from *Erolia*. The Phalaropine character of the toes is already present in the newly hatched chick and the greater breadth of the bill in *fulicarius* is manifest.

The Sanderling chick is quite distinct as a species, but it is distinctly Eroline in the character of its down.

I must call your attention to the chicks of the Ruff (*Philomachus pugnax*), the Snipe (*Capella gallinago*), and the Broad-billed Sandpiper (*Limicola falcinellus*), which I exhibit with the others. It is obvious that in its down plumage the Ruff is essentially Eroline, and it seems reasonable to suppose that *Philomachus* is a late "twig" on the Eroline branch. You will see, too, that in most respects also the Snipe is Eroline. The chick, too, of *Limicola* shows all the characteristics of *Erolia*, with which genus it may well be placed.

On the few chicks available to me I cannot say that there is any difference between the Spotted and the Common Sandpiper, *Tringa macularia* and *T. hypoleucos*, except in the leg-coloration. They form rather a distinct type. The *single* dark loral streak passes back through the eye to the hind part of the crown, there is no second streak as in *Erolia*; there is a distinct black median streak on the crown and another on the dorsum, the rest of the upper parts may be called "pepper-and-salt" coloured. A chick from the Dresser Collection, labelled *Terekia cinerea*, I cannot distinguish from these two, and if correctly identified I should hesitate to recognize the genus *Terekia*.

Quite distinct from the Common Sandpiper group are the chicks of the Green Sandpiper (*Tringa ochropus*), Wood-Sandpiper (*T. glareola*), Redshank (*T. totanus*), Dusky Redshank (*T. erythropus*), and the Greenshank (*T. nebularia*). There is a single dark loral streak through the eyes as in the last group, but the pattern of black and buff on the upper parts forms definite lines. There is a broad median dorsal streak enclosed by a pale streak on either side. On the crown the dark lines vary in the different species: in *ochropus* there is

a dark median line with a dark lateral on each side, pale in between, in *glareola* and *erythropus* the three lines have coalesced into one large plaque, in *totanus* the tendency to coalescence can be seen. The chick of *nebularia* stands out from the rest in that grey or greyish buff replaces buff in the patterns.

In the Stilt (*Himantopus himantopus*) the down bears a distinct resemblance to the *Tringa* group ; the long legs and bill are characteristic even at this early age.

The Turnstone (*Arenaria interpres*) has the pattern of the upperparts more broken up than in *Tringa* and it lacks the white points of *Erolia*. The character of the adult bill can be discerned in the newly hatched chick, as also of the black pectoral band.

The Woodcock (*Scolopax rusticola*) is quite unlike any other species with its striking chesnut and rusty buff pattern, the only black parts being the loral streak to the eye and that on the middle of the forehead. In the pattern it is nearest to *Tringa*, chestnut replacing black and rusty buff replacing buff. The comparatively short tarsi are characteristic, and the bill recalls that of the adult.

The last two appear to me to be very aberrant. The down of the Indian Courser (*Cursorius coromandelicus*) bears an extraordinary resemblance to that of the Indian Sandgrouse (*Pterocles exustus*) in texture and coloration. The elements of the down in these two species are alike, and quite different to the other waders I have shown you. The difference is due to the shorter, greater compactness of each down element, each more resembling a true feature than is the case with the other waders. In the latter the down elements are more primitive and each is a looser, longer structure giving the characteristic " fluffy " appearance to the chicks compared with the " velvety " appearance in the Sandgrouse and Courser. In other respects, too, *Cursorius* is aberrant, and perhaps its connection with *Pterocles* is not so remote.

The other aberrant wader is the Crab-Plover (*Dromas ardeola*). The chick is covered with two shades of grey down with no pattern and is not very unlike the chick of the Ivory Gull (*Pagophila eburnea*). Note, too, the relatively huge bill

and the one-third webbed feet, both reminiscent of the *Laridæ*. You will recall, too, the aberrant nidification of this bird, which tunnels into sand-banks and lays a single large white egg.

Lord Rothschild exhibited the hitherto unknown eggs of the Paradise-Crow (*Lycocorax pyrrhopterus pyrrhopterus* Bonaparte) collected by Mr. Shaw Mayer at Patani, S.E. Halmaheira, Dec. 24, 1929.

The nest was stated to be a large open structure of sticks resembling a crow's nest. The eggs have a rose-pink ground-colour, slightly washed with brown and scrolled all over with scribbled brown and black lines of varying diameter, about halfway in appearance and density between the scrolling on the egg of the Collared Bower-Bird (*Chlamydera nuchalis*) and that on the eggs of some Buntings (*Emberiza*). The eggs measure 29 × 20 mm. and 29 × 18 mm. The single egg known of the Obi Island Paradise-Crow (*Lycocorax pyrrhopterus obiensis* Bernstein) is described as of a greyish-pink ground-colour scrolled only at the larger end with *Emberiza*-like scribbles.

He also exhibited an egg of *Phonygammus keraudrenii keraudrenii* (Lesson & Garnier). The egg has been exhibited and described before, but it has remained for Mr. W. J. C. Frost to discover the curious nesting-habits of this Bird of Paradise. It lays its eggs in the nests of *Paradisea apoda* Linn., and its behaviour is exactly that of the parasitic Cuckoos. The *Phonygammus* is always seen following the females and young of *P. apoda* about, but never approaches the old males on the dancing trees of the latter.

Mr. P. F. Bunyard exhibited a clutch of four eggs of the Greater Yellow-legs or Yellowshank (*Tringa melanoleuca*) taken by Prof. Rowan on May 26, 1930, during a trip into the Alberta (Canada) muskegs, incubation advanced.

The nest was a shallow cup on the ground, sparsely lined with wood-chips, at the intersection of two decayed logs, on open Jackpine ridge flat (burnt over some years previously), vegetation sparse. The bird was lifted off the eggs, flying round after release, perching on stumps, and calling incessantly,

and was subsequently joined by its mate. The nearest lake was half a mile distant.

According to A. C. Bent's 'Life Histories of North American Shore Birds,' U.S. Nat. Mus. Bull. 142, 1927, p. 324, Dr. E. W. Nelson was the first to discover the eggs of this species in 1876. They appear to be fairly well known in America, measurements of 51 eggs being given in the afore-mentioned publication.

Besides those which the author exhibited only six other eggs appear to have reached this country. In 1924 Lieut. J. S. Dyson brought back from the Chilcotin district, Central British Columbia, two eggs, taken by a man named Newton, one of which was badly fractured. A water-colour drawing of these eggs was exhibited for comparison with those taken by Prof. Rowan, from which it will be seen that they are identical, but not so boldly marked.

There is a clutch of four eggs in Mr. Massey's collection from Grand Lake, Newfoundland, taken on June 13, 1922—a late date. Mr. J. R. Whitaker found eggs on June 6. According to Bent's data they appear to breed later in Newfoundland and Labrador.

Mr. Massey's eggs have also been through Mr. Bunyard's hands, and were drawn by his daughter for his album of the eggs of the rarer Limicolæ exhibited by him at the Club, December 4, 1928 (Bull. B. O. C. xlix. 1928, p. 41).

Bent describes the eggs as being practically indistinguishable from those of the European Greenshank. It will be seen from those of the Greenshank (*Tringa nebularia*) and of the Common Redshank (*Tringa totanus totanus*), exhibited for comparison, that they are very much more closely allied to the latter eggs, the ground-colour and superimposed markings being practically identical.

Comparative Systematic Analysis.

T. melanoleuca.	*T. nebularia.*
Ground-colour.	
Dark ochraceous buff.	Greenish grey, pale and reddish buff.
Colour of Markings.	
Rich reddish brown to brownish black, a few brownish-black hair-lines are present at large ends.	Brownish black to pale reddish brown, hair-lines occur.

Underlying Markings.

Reddish grey, tinged mauve, inconspicuous, almost absent.	Ash-grey tinged mauve, numerous and conspicuous.

Average Measurements.

8 eggs (*Bunyard*).	25 eggs (*Rey*).
49·4 × 33·8 mm.	49·55 × 39·87 mm.
51 eggs (*Bent*).	Max. 54 × 34 mm.
48·9 × 33 mm.	Min. 45·7 × 33·1 mm.
Max. 53·5 × 33·8 mm.	
Min. 43·7 × 31·5 mm.	

Average Weight.

8 eggs (*Bunyard*).	25 eggs (*Rey*).
1·509 mg.	1·386 mg.

Shape.

Ovate pyriform.	More sharply pyriform.

Texture of Shell.

Considerably finer in granulation, consequently show more gloss.	Coarse, mostly showing a mat surface.

General Remarks.

There are no other eggs of North American birds with which they could be confused. In general characteristics they are distinctive.

It will be seen from the above figures that *T. melanoleuca* eggs are rather smaller than those of *T. nebularia*, the former, however, are considerably heavier. They are considerably larger than those of the smaller species (*Tringa flavipes*), which they slightly resemble, except in the ground-colour (Bull. B. O. C. xlvi. 1926, p. 121).

The discovery of these eggs is recorded by Prof. Rowan in Brit. Birds, xxiv. 1930, pp. 90–93, and they are the same clutch as shown in the photograph of the nest *in situ* on p. 92.

Lieut. J. S. Dyson, M.B.O.U., has also supplied us with very valuable field-notes on the breeding of this species (Bull. Brit. Oolog. Assoc. i. 1925, p. 69).

Mr. Bunyard also exhibited a clutch of three eggs of Bonaparte's Gull (*Larus philadelphia*), also taken by Prof. Rowan on May 30, 1930, in the Alberta muskegs.

The nest, a typical one, was placed on the top of a tamarac bush about 15 ft. from the ground ; when found the bird was incubating, but when flushed immediately attacked the party swooping with considerable alarm and unpleasant intent. The nearest lake was a quarter of a mile distant.

Compared with the two clutches exhibited by Mr. Bunyard in 1926 (Bull. B. O. C. xlvi. 1926, pp. 108–110), they are rather larger, but otherwise typical.

Weights and Measurements of each Egg.

No.	mg.	mm.
1	1·690	51 × 35
2	1·725	50 × 36
3	1·775	50 × 35·8

Average Weights and Measurements of 12 *eggs* (Bunyard).

mg.	mm.
1·668	48·9 × 35·1

Three clutches of the above are in the Bunyard collection and one in the Massey collection.

The Rev. F. C. R. Jourdain sent the following comment upon Mr. Bunyard's paper :—

In Mr. Bunyard's communication to the Club he stated that only 10 eggs of the Greater Yellowshank had reached England. The first clutch of which I have any note was taken in 1903 by Evan Thompson and was in Major Proctor's collection (c/3) ; Mr. J. Whitaker has c/4 taken in 1920, and Mr. H. Massey has two clutches of 4, one sent by Prof. Rowan this year. (Another c/4 sent to Mr. Hiden was unfortunately wrecked in the post.) There are also two old eggs in the Cambridge Museum, so that there are at least twenty-three specimens now in existence in England, more than double the number mentioned by Mr. Bunyard.

Dr. G. Carmichael Low gave an account of a recent visit to Canada and the United States during August and September 1930 :—

Though primarily for medical purposes, the opportunity was taken of seeing as much ornithology as possible, and fair numbers of birds were seen.

Leaving Liverpool on August 8, 1930, the Irish Channel was crossed to Belfast. Many Gulls (*Larus argentatus argentatus* and *L. fuscus graellsii* chiefly) accompanied the steamer, and their number was augmented considerably at Greenock next morning—further species noted being *L. marinus*, *L. canus canus*, *L. ribidundus ribidundus*, and several *Sterna hirundo hirundo*. On the way down the Clyde, Gannets (*Sula bassana*) appeared, and between the Mull of Kintyre and the North Coast of Ireland many Puffins (*Fratercula arctica grabæ*) were seen.

Next day a few Manx Shearwaters (*Puffinus puffinus puffinus*) were noted and still a number of Lesser Black-backed Gulls (*L. fuscus graellsii*). These gradually disappeared until about 100 miles out the last ones had gone, and then a dead area was experienced with no life at all. South of Greenland a few large Shearwaters, possibly *Puffinus kuhlii borealis*, the North Atlantic Shearwater, or *Puffinus gravis*, the Greater Shearwater, appeared, but after that, until Belle Isle was reached and the Straits were passed into the Gulf of St. Lawrence, there was nothing. The American Gulls then took up their place astern of the steamer and followed it up to Quebec. *Larus argentatus smithsonianus*, *L. marinus*, and a Kittiwake Gull (*Rissa tridactyla tridactyla*) were specially noted. Between Quebec and Montreal the only interesting things were two Red-necked Phalaropes (*Phalaropus lobatus*) and a small bunch of Sanderlings (*Crocethia alba*) on a spit of mud.

From Montreal the journey lay *via* Niagara Falls to Toronto, where a very pleasant day was spent with J. H. Fleming. The morning was devoted to inspection of his wonderful collection of skins and to a visit to the shore of the lake, the afternoon to bird-observation on the island opposite the city.

The following birds were seen: Bronzed Grackle (*Quiscalus quiscula æneus*), Semipalmated Plover (*Charadrius semipalmatus*), Semipalmated Sandpiper (*Ereunetus pusillus pusillus*), Spotted Sandpiper (*Tringa macularia*), Red-shoulder

Blackbird (*Agelaius phœniceus*), Red-headed Woodpecker (*Melanerpes erythrocephalus*), Crow (*Corvus brachyrhynchos*), Belted Kingfisher (*Ceryle alcyon*), Ring-billed Gull (*Larus delawarensis*), Herring-Gull (*Larus argentatus smithsonianus*), Bonaparte's Gull (*Larus philadelphia*), Common Tern (*Sterna hirundo*).

At Minaki, north of the Lake of the Woods, five large Phalaropes (probably *Phalaropus fulicarius*) and four Spotted Sandpipers were noted.

At Winnipeg, in the garden of his host Mr. McMahon and at 9 Middlegate, quite a number of interesting birds lived. Robins (*Planesticus migratorius*), Cowbirds (*Molothrus ater*), White-breasted or Carolina Nuthatches (*Sitta carolensis carolensis*) and two beautiful little Ruby-throated Humming-birds (*Archilochus colubris*) spent their day hovering round the flowers of the gladioli.

So fascinating were these little objects, like jewels in the brilliant sun, that it was difficult to conceive of them taking the long journey of thousands of miles north and south every year.

English Sparrows (*Passer domesticus*) were present as well, and were proving themselves a nuisance here as well as in other parts of Canada. They had usurped the nesting-boxes specially put up for the Purple Martins (*Progne subis*) and Bluebirds (*Sialia sialis*), and had driven these away. Their spread in North America has been phenomenal. Hardy as at home, they survive the intense cold and have spread and multiplied all the way to the Pacific Coast. By their taking the food of the indigenous species and driving them out they may do incalculable harm.

On the banks of the Red River, on a spit of mud some twenty miles north of Winnipeg, just below the St. Andrews rapids near Fort Garry, some interesting waders were feeding. These were evidently migrants commencing their long journey south. There were two Greater Yellow-legs (*Tringa melanoleuca*), ten Lesser Yellow-legs (*Tringa flavipes*), four Red-backed Sandpipers—American Dunlins—(*Calidris alpina sakhalina*), one Least Sandpiper—Stint—(*Calidris minutilla*), one Buff-breasted Sandpiper (*Tryngites subruficollis*),

one Killdeer Plover (*Charadrius vociferus vociferus*), and one Semipalmated Plover (*Charadrius semipalmatus*).

From Winnipeg the journey lay across the prairie *via* Saskatoon and Edmonton to the Rocky Mountains. Small lakes called sloughs abound here, and many Duck were collecting on them for the southern migration.

Mallards or Green-heads (*Anas platyrhynchos*), Gadwalls (*Anas strepera*), Red-heads (*Nyroca americana*), Canvas-backs (*Nyroca valisineria*), Lesser Scaup (*Nyroca affinis*), and many others not identifiable from the moving train.

At Edmonton Professor Rowan demonstrated his experimental houses where his experiments on Bird Migration had been carried out. A few of his Juncos (*Junco hyemalis connectens*) were still there, but later experiments had been carried out with Crows (*Corvus brachyrhynchos brachyrhynchos*).

The Pacific Coast and Vancouver Island were disappointing for Waders. Several Wilson Phalaropes (*Phalaropus* (*Steganopus*) *tricolor*) were seen on the sea near Victoria, but no other Charadriiformes were detected, though specially looked for.

In Mr. Butchart's sunk garden near Victoria a Hummingbird (*Selasphorus rufus*) was buzzing about amongst the flowers, and Californian Quails (*Lophortyx californicus californicus*) were common in the countryside round.

On the return journey a halt was made at Banff, Alberta, and a visit to a lake nearby, with Dan McCowan, a local Ornithologist, was of considerable interest. Here there was a nest of the American Osprey or Fish-Hawk (*Pandion haliœtus carolinensis*) on the top of a tall fir-tree and two young ones had been reared from it and had but recently flown. Numerous Mallards (*Anas platyrhynchos*), in eclipse plumage, called in Canada Green-heads, identical as far as could be judged with the European Mallard, two Pintail (*Anas acuta tzitzihoa*), two Buffel-headed Duck (*Bucephala albeola*), two American Goosanders (*Mergus merganser americanus*), and a Grebe which McCowan thought was a Western Grebe (*Æchmophorus occidentalis*) were feeding on the lake. Nearby a Sharp-shinned Hawk (*Accipiter velox*), an American Sparrow-Hawk (*Falco sparverius*), and some small birds were noted.

The home voyage began on September 19, 1930, from

Montreal. A large flock of Red-necked Phalaropes (*Phalaropus lobatus*), some 100 strong, rose from the water in the Gulf of the St. Lawrence, and after clearing the Straits at Belle Isle a large number of North Atlantic Shearwaters (*Puffinus kuhlii borealis*) followed the steamer across the Atlantic almost to the Irish Coast. An occasional slightly larger one, probably *Puffinus gravis*, the Greater Shearwater, was also seen from time to time. The latter part of the journey was very rough and little more was done. Gannets appeared some twenty miles off the Irish Coast and were also well represented in the Irish Channel south of the Isle of Man. Liverpool was reached on Friday, September 26, 1930.

One or two small birds came on board the steamer. One a Chipping Sparrow (*Spizella passerina*) was caught just after leaving Belle Isle and was quite happy in a cage for the remainder of the voyage. Another, very like a Lark, rested for a moment on the after-deck some 100 miles from the Irish Coast, but could not be absolutely identified.

Mr. W. L. Sclater exhibited and described a new race of the Little Green Barbet as follows :—

Viridibucco coryphæa jacksoni, subsp. nov.

Description. Closely resembling the typical and hitherto only known race from the Cameroon Mountain, but the yellow of the centre of the crown, back, and tail-coverts, and also on the wings, not golden yellow, but a pale yellow with a slight greenish wash. The dimensions are similar to those of the typical race. Wing of the type (♀) 51 mm., culmen 9 mm. " Iris brown, bill black, feet slate " (*F. J. J.*).

Type and only example examined, a female from Kanyango, Toro, Uganda, 4500 ft., collected Feb. 7, 1917, by the late Sir Frederick Jackson. Brit. Mus. Reg. no. 1930.10.13.1..

This little bird came to my notice through Mr. W. F. H. Rosenberg, who brought the skin to the Museum for identification, and from whom it was subsequently acquired for the Museum collection.

Viridibucco coryphæa was first described by Dr. Reichenow from Buea on the Peak of Cameroon at about 3000 feet,

and was subsequently obtained by Boyd Alexander in the Manenguba Range and by Mr. Bates at several localities in the mountains on the western borders of Cameroon. Dr. Reichenow *, in his account of the collections of the Duke of Mecklenburg from the Central African Lake Districts, records an example from the foot of Karasimbi, one of the Kivu Volcanoes.

Reichenow's example, which I have not had an opportunity of examining, should doubtless be referred to the new race. This is only one of the many examples of Cameroon Mountain species reappearing in the mountain regions of Central Africa.

Mr. N. B. Kinnear and Mr. Hugh Whistler forward the descriptions of two new races of Indian Tree-Pie, based on material collected by the Vernay Scientific Survey of the Eastern Ghats :—

(1) **Dendrocitta rufa vernayi**, subsp. nov.

Distinguished at the first glance from the typical race (Malabar) by the extreme paleness of the whole plumage. It is even paler throughout than *D. r. pallida* Blyth (type-loc., Simla), the abdomen being a pale creamy fulvous and the chin, throat, and upper breast almost sooty grey instead of sooty black. From the latter race it is also distinguished by the smaller size and shorter tail : wing ♂ 144·5–157·5, ♀ 139–149·5 (as against ♂ 153–172·5, ♀ 159–160) ; tail ♂ 201–226, ♀ 187–224 (as against ♂ 242–309, ♀ 259–275).

Distribution. S.E. India south of the Godavery, Nilgiris, and S. Mysore.

Type in the British Museum. ♂, Nallamalai Range, 2000 ft., S. Kurnool. V. S. La Personne Coll. no. 957, 1st Nov., 1929.

(2) **Dendrocitta formosæ sarkari**, subsp. nov.

Differs from *D. f. himalayensis* Blyth (Himalayas, restricted to Sikkim) only in the much smaller beak, which in six males measured from the skull 33–34 mm., as compared with 36·5 to 38·5 mm. in *D. f. himalayensis.*

* Wissensch. Ergeb. Deutsch. Zentr.-Afr. Exped., Zool. i. 1910, p. 280.

Distribution. Resident and common in the Eastern Ghats of the Vizagapatam District about Jeypore and Anantagiri.

Type in British Museum. ♂, Anantagiri, 3000 ft., Vizagapatam. V. S. La Personne Coll. no. 1325. Feb. 5, 1930.

Mr. Gregory M. Mathews sent the following :—

To those who put all the Cormorants into the genus *Phalacrocorax* the following change will be necessary :—

For *Stictocarbo steadi* Oliver, 1930, read

Phalacrocorax oliveri, new name—the name *steadi* being in use from 1913.

NOTICES.

The next Meeting of the Club will be held on Wednesday, November 12, 1930, at PAGANI'S RESTAURANT, 42–48 Great Portland Street, W. 1. The Dinner at 7 p.m.

Members intending to dine are requested to inform the Hon. Secretary, C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7.

Mr. George Brown will read a paper on the "Migration of Birds in the Hill Districts of Ceylon."

Members who intend to make any communication at the next Meeting of the Club should give notice beforehand to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W.1, and give him their MSS. for publication in the 'Bulletin' not later than at the Meeting.

Bird Room

PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCXLV.

The three-hundred-and-fortieth Meeting of the Club was held at Pagani's Restaurant, 42–48 Great Portland Street, W.1, on Wednesday, November 12, 1930.

Chairman: Major S. S. Flower.

Members of the B.O.C. present:—Miss C. M. Acland; E. C. Stuart Baker; D. A. Bannerman; F. J. F. Barrington; G. Brown; P. F. Bunyard; Sir Percy Z. Cox; Lt.-Col. A. Delmé-Radcliffe; A. H. Evans; A. Ezra; Miss J. M. Ferrier; Hon. M. Hachisuka; J. M. Harrison; Dr. E. Hopkinson; Rev. F. C. R. Jourdain; Miss E. P. Leach; Dr. G. Carmichael Low (*Editor*); N. S. Lucas; C. W. Mackworth-Praed (*Hon. Sec. & Treasurer*); Dr. P. Manson-Bahr; G. M. Mathews; J. L. Chaworth Musters; C. Oldham; B. B. Osmaston; Lord Rothschild; W. L. Sclater; Major A. G. L. Sladen; Dr. A. Landsborough Thomson; B. W. Tucker; Miss E. L. Turner; H. M. Wallis; J. Sladen Wing; H. F. Witherby; C. de Worms.

Guests:—W. B. Alexander; Miss Evans; H. A. Evans; M. A. C. Hinton; Miss D. Hordern; G. C. Horn; Lt.-Col. R. F. Meiklejohn; Mrs. A. H. Murton; Lt.-Col. W. A. Payn; F. J. Waydelin.

Mr. George Brown read the following paper:—

Notes on the Hill-Migrating Birds of Ceylon.

The main migratory movements of the birds of Ceylon may be said to coincide with the two monsoons. The north-east monsoon, occurring at the fall of the year, brings the Siberian and North Indian birds from the far north and north down southwards, and quite a number of these birds reach Ceylon, which lies about seven degrees north of the Equator, with a big expanse of ocean around it and beyond. Ceylon therefore may be said to be at the end of a flight route, though probably some birds go beyond it to the Malay Archipelago, perhaps *via* the Nicobar Islands.

About a third of the birds of the island are true migrants—that is to say, of the 378 species known in Ceylon about 120 migrate. In addition to this there is quite a lot of local migration, which takes place at the change of the two monsoons.

Now, I said just now the migration proper to and from Ceylon coincided with the monsoons, and this is true; but let us look at the problem a little closer.

The north-east monsoon is really not in full force in Ceylon till, say, November of each year, but long ere this there has been a north-east tendency of the wind, though probably often only in the upper reaches of the atmosphere. This first tendency to blow from the north-east starts about the period of the full moon, which may occur at the end of July or the beginning of August (call it the August moon) right up to the end of March or the beginning of April the following year. Now, directly the wind tends to veer round from the south-west and blow from the north-east—which, as I said, appears to be at the time of the August full moon—round about that period the forerunners of the north-east migration always appear in the Ceylon hill districts. This wave of migration is only a small one, and may possibly consist of male birds, or even females that have failed for some reason or other to mate, though this is only a surmise.

The next wave of migration, which is a much more extensive one, seems markedly to coincide with the September full moon, when the north-east tendency of the wind is still more emphasized, and, again, with the October moon the migration

is tending to reach its apex, whilst most of the Ceylon winter migrants have arrived by the beginning of November. I have constantly noticed the tendency (at all events during August and September) for the birds to arrive *round about the time of the full moon*, but this is not so noticeable afterwards; for instance, the Painted Thrush (*Pitta brachyura*) always appears to arrive during a date between the 15th and 20th of October, whatever the state of the moon may be.

Now, before touching on the names of the actual migrants that arrive in the hill districts of Ceylon, let us glance for a moment at the route which many of them probably take. We must here reflect that we are mostly concerned with, shall we say, the western or Malabar invasion of migrants, which is composed chiefly of Warblers, Shrikes, Thrushes, etc.—that is, birds inhabiting the hill districts or most ancient districts of Ceylon; and we are not so much concerned with the eastern or more recent Carnatic invasion, concerning which Mr. Wait, the great authority on birds in Ceylon, has written a very interesting paper in 'Spolia Zeylanica,' x. 1914, pp. 1–32. This Malabar invasion does not, I think I may definitely say, cross over the Palk Straits, which divide Northern Ceylon—that is, the Jaffna Peninsula from South India—but it keeps much more to the west, and it may possibly keep well out to sea, or perhaps reaches Cape Comorin, the most southernly point of the Indian continent, and crosses the sea to the west coast of Ceylon; and I fancy these waves of migratory birds strike the coast on the western side, between Chilaw and Colombo, for they probably follow the direction of the old land route of past ages. At any rate, the first arrivals to Ceylon are always reported from the western side of the island.

Now let us, to revert for a moment, take it that the full moon falls right at the end of July or early in August (say the August moon). There are bound then to be signs of a north-eastern monsoon tendency, such as sheet lightning, indicating thunderstorms in the distance, and the wind will tend to shift from south-west to north-east. The first migrants to arrive about this time are the Common Sandpiper (*Tringa hypoleucos*), the Grey Wagtail (*Motacilla cinerea caspica*),

the Blue-tailed Bee-eater (*Merops superciliosus javanicus*), the Brown Shrike (*Lanius cristatus cristatus*), the Pin-tailed Snipe (*Capella stenura*). The first arrival of the Snipe is generally reported from the low country beyond Colombo, whilst the other birds mentioned are practically always first reported from the hill districts round Nuwara Eliya, the highest plateau of Ceylon. I think the migratory flight probably strikes the coast of Ceylon at the mouth of the Mahaoya, and at once sweeps up-country to the highest hill districts, and from there, in many cases, it follows the tributaries of the Mehaliganga across the hill districts, whilst in other cases it sweeps across the hill districts and down over the following low country to the south coast of Ceylon. At this season of the year (August) there are very distinct local movements of birds taking place as well, especially amongst the Hawks, Kites, and Harriers, and about now fresh Mynahs and fresh Drongos appear in one's garden, and many of these birds at this season mimic the call-notes of resident low-country birds. The Mynah especially mimics the "Did-he-do-it," or Red-Wattled Lapwing (*Lobivanellus indicus indicus*), and I have heard the Drongo on an up-country tea-estate in September mimic the note of a Golden Plover to perfection; and no Golden Plover has ever been recorded or is likely to be ever seen in these parts of the island. The Green Bulbul (*Chloropsis aurifrons aurifrons*), that arch mimic, contrives to imitate the cries of many species of birds. This first small wave of migration appears to have spent its force after the full moon, and now we must look to the time round about the next full moon (*i. e.*, the September moon) for the next wave of migration. Local migration again is notable at this period. Some Hoopoes (*Upupa epops ceylonensis*) seem to move from the dry east coast towards a peculiar dry zone known as the Wellanda zone in the hill districts, and one is often informed by the unwary that the Painted Thrush (*Pitta brachyura*) has arrived. This is a mistake, as this bird does not arrive till October, of which I shall have more to say in a minute. The Painted Thrush is really being imitated in its call-note by either a Drongo or Green Bulbul, and it is surprising the number of people who are taken in by this mimic. The

Painted Thrush is called by the Cingalese "Avitichia" (meaning "give back," because the Peacock, according to their folk lore, is supposed to have robbed it of its tail), and by the Tamils "Aru-Money Kuruvi" (the Six o'clock Bird), because at sunrise and at sunset this bird gives vent to a most distinct whistle of two notes. As I have just said, the Drongo and Green Bulbul copy this to perfection, and even copy it a whole month or more before it arrives in the island.

The birds that arrive in September, besides a much greater number of those that have already arrived in August and which I have already mentioned, are the Wood-Sandpiper (*Tringa glareola*), the Green Sandpiper (*Tringa ochropus*), the Forest-Wagtail (*Dendronanthus indicus*), the Green Willow-Warbler (*Acanthopneuste nitidus nitidus*), and one or two others.

Then comes the October wave of migration, which does not seem to depend so much on the period of the full moon, perhaps because the wind has by now definitely settled to blow from a north-east direction, and so any time would be suitable for the migration flights. Enormous numbers of birds now arrive, including very large numbers of those species already mentioned; but to mention a few of the new arrivals: the Indian or Eastern Red-breasted Flycatcher (*Siphia parva albicilla*), the Brown Flycatcher (*Alseonax latirostris poonensis*), the Indian Paradise Flycatcher (*Terpsiphone paradisi paradisi*), the Small Cuckoo (*Cuculus poliocephalus poliocephalus*), the Common Hawk-Cuckoo (*Hierococcyx varius*), the Indian Plaintive Cuckoo (*Cacomantis merulinus passerinus*), the Indian Blue Chat (*Larvivora brunnea*), the Painted Thrush (*Pitta brachyura*), etc. All the other migrant birds arrive approximately at round about the same date each year. The Painted Thrush, referred to before, called by the Tamils "Aru-Money Kuruvi," is extremely consistent as to the date of its arrival, which is the middle of October.

I find from my notes for several years that these birds used to arrive at the tea-estate named Rasagalla, where I lived, practically to the same date, which was October 17; and on October 16 I have on two or three occasions said to my wife "To-morrow morning at sunrise you will hear the Pitta." Sure enough, there he was, giving vent not first of all to his well-known two-note whistle, but on arrival *always* to a harsh

jazz note or hiss (spelt with a " z "), which I think is a sound of defiance, in order to warn any other migrants off his winter beat. The jazz note is uttered for two or three days, and also sometimes afterwards if the bird is disturbed, but usually the note later on is a two-noted whistle. The Flycatchers, too, are very faithful to date, and come back practically to the same spot and same tree year after year. In November the Rails (Rallidæ) and Bitterns (Ardeidæ) arrive in numbers, and many seem to take a flight line from west to east over the hill districts. About this time the Rails, especially the Banded Crake (*Rallina superciliaris superciliaris*), is found in all sorts of odd corners of Ceylon, even in the bungalow verandahs in Colombo.

Such, then, is a rough account of the arrival of the hill migrants of Ceylon. The birds remain in the island till about April, when they all move northwards again. At the time of going there is a marked restlessness noticeable, but not so marked as on their arrival ; perhaps because the local birds are, many of them, nesting, and have not the time to go in for so much mimicry. One sees a change in plumage gradually developing in those which are about to leave, for, of course, they are adopting their breeding-plumage. By the end of April, or perhaps the first week in May, all have gone, and the south-west winds have taken the place of the north-east winds.

There are many points of interest connected with the Ceylon bird migration which are not touched on here, but I should like to emphasize that the almost invariable arrival of the first migrants is in August and September, round about the time of the *full moon*—that is, when one would expect a north-east tendency of the wind ; and in October I would like to emphasize the accuracy with which we may forecast the arrival of certain birds in any particular district, such as the Flycatchers and Pittas. It is a subject full of interest, and one which, I feel sure, anyone perched away by himself on the side of a mountain will find worthy of following up and making notes upon.

In the discussion which followed, Dr. Landsborough Thomson asked about the age and sex of the migrants. Mr. Brown replied that he had not specially considered the point, but he thought the early arrivals were males.

Mr. B. B. Osmaston said the Painted Thrush (*Pitta brachyura*) arrives in vast numbers in the Himalayan submontane forests of the United Provinces about May 15, and breeds throughout them, leaving again at the end of September. It does not winter either in the United Provinces or the Central Provinces, but doubtless goes through to Ceylon, where, however, it does not breed.

Two species of Red-breasted Flycatchers (*Siphia*) breed in Kashmir. The European one winters throughout the plains of India, the Kashmir one, as far as is known, only in Ceylon.

Lord Rothschild exhibited a series of sixteen skins of male Pochard, *Fuligula ferina*, to illustrate the gradual passage from the eclipse plumage to the full winter plumage. He drew special attention to the bird in complete eclipse, as this phase of plumage in the Pochard was extremely rare in museums and collections. He also drew special attention to the irregularity of the moult as shown by the dates of the specimens exhibited; several retaining a larger amount of the eclipse plumage were shot later than some showing a greater amount of the winter plumage. An adult breeding female was shown for comparison. The whole of the seventeen examples shown were shot on the Tring Reservoirs.

The Rev. F. C. R. Jourdain, referring to Lord Rothschild's interesting exhibit, pointed out that the breeding-season of the Pochard has a remarkably wide range. Although at Tring most birds breed about the end of May, and clutches have been found in June, the average date in Essex and Lincolnshire for full sets is about April 26, while in the Moray area of Scotland, where the birds might be expected to lay considerably later, full sets may be found at the very beginning of May. A discrepancy of five weeks in the breeding-season implies a similar difference in the age of the drakes at any given date in following years.

Mr. P. F. Bunyard exhibited a clutch of eight eggs of the Great Tit (*Parus major newtoni*) taken from a pear-tree in a Kentish orchard on May 20, 1928.

The eggs were found and the birds identified by R. J. Goodchild, of Farnborough. They were remarkably well and richly marked, the size of some of the largest markings measuring 9×5 mm., mostly in the form of zones near the large ends. Mr. Bunyard also exhibited a series of clutches of the same species in which practically every known form and variety were represented—heavily marked clutches, richly zoned specimens, modified forms, one clutch of eight leucitic (unmarked) eggs, and an aberrant clutch of seven, with suffused zones at the large ends.

The series represented fifty years' collecting, and the eggs were mostly from Kentish orchards.

Major A. G. L. Sladen drew attention to another clutch in the series of eggs exhibited by Mr. Bunyard, pointing out one that he considered remarkable, the eggs in it reminding him of those of the Grasshopper-Warbler. Mr. Bunyard thought, however, that they compared more favourably with certain forms of Willow-Warbler's eggs (*Phylloscopus t. trochilus*).

Dr. G. Carmichael Low communicated the following note on the genus *Calidris* :—

His attention had been called to the use of the two generic names *Erolia* and *Calidris* for the Stint and Dunlin in the last number of the ' Bulletin ' (Bull. B. O. C. li. 1930, pp. 6 and 14). The explanation of this discrepancy was as follows :—The genus *Tringa* used to be applied to the Knot, Dunlin, Stint group of Sandpipers, but had to be changed to the Redshank group (formerly *Totanus*), necessitating a new name for the former. American and other authorities, who believe in many genera, split the old Tringinæ subfamily up, and use the generic name *Canutus* or *Calidris* for the Knot, *Pisobia* for the Stints, Pectoral, Baird's, and Bonaparte's Sandpipers, *Pelidna* for the Dunlins, *Arquatella* for the Purple Sandpipers, and *Erolia* for the Curlew-Sandpiper.

In the 1923 ' List of British Birds,' published by the British Ornithologists' Union, the subfamily is grouped into one genus (*Erolia*), with the exception of the Knot (*Calidris*), which is kept in a distinct genus by itself.

Later, Hartert, Witherby, and others have decided that the Knot cannot be generically separated from the other members

of the subfamily, and so the name *Calidris*, which is the oldest, must be adopted, the subfamily becoming the Calidritinæ, with *Calidris* the generic name for the Knot, Stints, Dunlins, Pectoral, Baird's, Bonaparte's, Purple, and Curlew-Sandpipers.

Certainly it would seem inconsistent to separate the Knot, if members so different as the Curlew-Sandpiper and Stints are to be grouped together, and therefore, following Hartert and Witherby, I think the name *Calidris* is the one that should be adopted.

Dr. C. B. Ticehurst, in his exhibition of the young in down of the Knot and other Waders (Bull. B. O. C. li. 1930, pp. 5–9), has confirmed the original work of Dr. P. R. Lowe on the colour-pattern of this subfamily embodied in his paper "Coloration as a Factor in Family and Generic Differentiation," which deals with the colour-pattern in relationship to classification [Charadriiformes (Scolopacidæ), pp. 337–340)], Ibis, 1915, pp. 320–346. Dr. Ticehurst again establishes the closeness of the relationship of this species to the Dunlin, Stint group.

Anatomical and other characteristics should be investigated as well, however, and Dr. P. R. Lowe, I believe, is engaged upon this now. His verdict will be awaited with interest, and will, I hope, settle the point.

Messrs. N. B. Kinnear and Hugh Whistler forwarded the following description of a new subspecies of Nuthatch :—

Sitta castaneoventris almoræ, subsp. nov.

Distinguished from *S. c. cinnamoventris* (E. Himalayas) by the paler underparts in both sexes. In the male the throat, breast, and abdomen, and the terminal fringes of the lower tail-coverts are cinnamon-brown as opposed to chestnut-brown in the East Himalayan form. Both races are immediately distinguished from the typical form by the very heavy beak.

Distribution. Kumaon and Gahrwal Himalayas.

Type in the British Museum, ♂, October 29, 1866. Valley of Ramganga between Almora and Pethora (Hume Collection). Brit. Mus. Reg. no. 1886.11.1.1917.

Note.—We reserve opinion on the substitution of the name of *Sitta castanea* for this species pending a further revision of the group.

Mr. David Bannerman sent the description of a new race of the Chestnut-winged Pratincole from West Africa, which he proposed to name

Glareola pratincola boweni, subsp. nov.

Distinguished from *G. p. limbata* Rüppell, the form which inhabits the Sudan and Abyssinia, with which most writers, except the late Mrs. Meinertzhagen, have allied it, by its smaller size and less olive upper parts. It is a dark-backed race, decidedly darker and smaller than typical *G. p. pratincola*, but not so dark or so small as *G. p. erlangeri*.

Wing-measurements, 3 males 187–196, 2 females 185–186, 7 with sex undetermined 179–193 mm.

Bill 12–16 ; tail 105–114 ; tarsus 30–34 mm.

Range. West Africa, from Senegal to Lake Chad.

I have examined examples from Senegal, Gambia, Gold Coast, and Lake Chad. As already pointed by Mrs. Meinertzhagen, two examples from the Gambia of uncertain origin do not conform to the others.

Type in the British Museum, ♂ adult. Nokunda, Gambia, Jan. 21, 1929. No. 507, Brit. Mus. Reg. no. 1929.2.18.78. W. P. Lowe and E. Hopkinson collectors.

Bill exposed 13 ; wing 190 ; tail 106 ; tarsus 34 mm.

Note.—Mrs. Meinertzhagen, in her review of the Cursoriidæ (Ibis, 1927, pp. 469–501), noted the small dimensions of the West Coast birds, which she tabulates on p. 491 of her paper, but allies them on this account with *G. p. erlangeri* Neumann, a darker-backed race which is even smaller than the West Coast race, and which appears to be restricted, as Mr. Sclater has noted (' Systema Avium Æthiopicarum,' 1924, p. 140), to the South Somali coast-lands. The probability of the West African race proving distinct was pointed out to me by Mr. W. Wedgewood Bowen, of the Academy of Natural Science, Philadelphia, who kindly invited me to name it and make the type in the British Museum. I have much pleasure in naming this bird in his honour. Mr. Bowen is engaged upon a review of the races of this Pratincole, and will shortly have more interesting facts to lay before us. I therefore refrain from further comments.

Mr. Gregory M. Mathews sent the following :—

Myiomoira macrocephala enderbyi, subsp. nov.

Differs from *M. m. macrocephala* in being longer in the wing, viz., 77 mm.

Type in the British Museum, ♂ adult. Enderby Island, near Auckland Island, New Zealand, Jan. 3, 1901. Brit. Mus. Reg. no. 1901.10.21.31.

Phœbastria nigripes reischekia, subsp. nov.

Differs from *P. n. nigripes* in its smaller size : wing 425 mm.

Type in the Vienna Museum. From New Zealand.

Erratum.

Page 14, for *Sitta carolensis carolensis* read *Sitta carolinensis carolinensis.*

NOTICES.

The next Meeting of the Club will be held on Wednesday, December 10, 1930, at PAGANI'S RESTAURANT, 42–48 Great Portland Street, W.1. The Dinner at 7 p.m.

Members intending to dine are requested to inform the Hon. Secretary, C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W.7.

Major Stanley S. Flower will give his Chairman's Annual Address.

Members who intend to make any communication at the next Meeting of the Club should give notice beforehand to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W.1, and give him their MSS. for publication in the 'Bulletin' not later than at the Meeting.

Bird Room

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

PURCHASED

No. CCCXLVI.

The three-hundred-and-forty-first Meeting of the Club was held at Pagani's Restaurant, 42–48 Great Portland Street, W.1, on Wednesday, December 10, 1930.

Chairman: Major S. S. Flower.

Members present:—Miss C. M. Acland; H. G. Alexander; W. B. Alexander; W. Shore Baily; E. C. Stuart Baker; D. A. Bannerman; F. J. F. Barrington; Miss M. G. S. Best; J. Delacour; Lt.-Col. A. Delmé-Radcliffe; A. Ezra; Miss J. M. Ferrier; Hon. M. Hachisuka; R. E. Heath; Rev. F. C. R. Jourdain; N. B. Kinnear; Miss E. P. Leach; Dr. G. Carmichael Low (*Editor*); Dr. P. R. Lowe; T. H. McKittrick, Jr.; Lt.-Col. H. A. F. Magrath; Dr. P. Manson-Bahr; G. M. Mathews; J. L. Chaworth Musters; T. H. Newman; C. Oldham; B. B. Osmaston; C. B. Rickett; B. B. Riviere; W. L. Sclater; D. Seth-Smith; Major M. H. Simonds; Dr. A. Landsborough Thomson; W. H. Thorpe; B. W. Tucker; H. M. Wallis; H. Whistler; H. F. Witherby; C. R. Wood; C. de Worms.

Guests present:—D. M. Baker; Miss E. S. Delmé-Radcliffe; Miss D. Hordern; H. R. Kirkwood; P. E. C. Manson-Bahr.

Chairman's Annual Address.

Part 1. Review.

Major Stanley S. Flower said :—

Ladies and Gentlemen,—

It is with deep regret that I have to record the deaths of three members of our Club :—

Edward Bidwell, an original member, on 23 Nov. 1929,
Richard Macdonnell Hawker,
Charles Edward Pearson, on 15 Nov. 1929,

and also of a former member, Alexander F. R. Wollaston, on 3 June, 1930.

Among the principal events of the year was the very successful International Ornithological Congress, under the presidency of Einar Lönnberg, held in Amsterdam in the first week in June 1930, when, amongst many other hospitalities, every member was presented with interesting booklets, in English, on Ducks by Eykman and on reserves by Van Oordt.

At the meeting of the Club on 8 Jan. 1930 Lord Rothschild exhibited and explained a special collection of Birds-of-Paradise known only from single examples or from one or two skins, and on 14 May, 1930, Witherby illustrated his account of Eastern Spain by means of Messrs. Newton's Epidiascope, this being the first occasion at which this instrument has been used at our Club.

The 19 Oct. 1929 was Hartert's seventieth birthday ; a "Festschrift," a special volume of the 'Journal für Ornithologie' contributed to by ornithologists in all parts of the world was brought out in his honour, and at our meeting, 13 Nov. 1929, he was presented by the B. O. U. with the Godman-Salvin Medal. This year Hartert has retired from the Tring Museum : we all look forward to seeing him from time to time, and are glad to hear that he is in better health and that he has congenial occupation amongst the birds in the Berlin Museum.

On 8 Oct. 1930 the Godman-Salvin Medal was presented to W. L. Sclater, in appreciation of his eminent service to ornithology, on the occasion of his retirement from the editorship

of 'The Ibis.' When we refer to any of the eighteen annual volumes and the supplements that he edited, we think of him with gratitude and, if I may say it, with pride.

Another retirement in the ornithological world during 1930 is that of Thomas Wells from the Bird Room of the Natural History Museum.

There have been many ornithological expeditions during the past year. Bates left England for West Africa in January 1930 and returned home in September. Admiral Lynes, after completing his great work on *Cisticola*, has gone again to South Africa, leaving us all his debtors for the monograph he has given us, in text and picture, which is not only a wonderful study of these Fantail Warblers, but also a model of how to handle a difficult group. Bowen and Gray have been collecting for the Philadelphia Academy of Science Museum, in Tropical Africa, as has also Boulton, of the Carnegie Museum, Pittsburg.

From Asia, Stevens arrived back in England towards the end of December 1929, and at the meeting of the Club on 12 Feb. 1930 gave an account of his adventurous journey in S.W. China; he left again in September for other little-known parts of Asia. From October 1929 to April 1930 the fifth expedition to French Indo-China was carried out by Delacour, assisted by W. P. Lowe, Greenway, and Poilane. Ludlow has been continuing his work in Central Asia, and the Bombay Natural History Society is organizing a survey of the Eastern Ghats.

G. Carmichael Low, between 8 August and 26 September, 1930, managed a visit to Canada and the United States, and on 8 Oct. 1930 gave the Club a very clear idea of the birds to be seen, on such a tour, not only in North America, but also in the North Atlantic.

Further ornithological results may be expected from the explorations of Wilkins and Edwards in Greenland and of Mawson and Falla in the Antarctic Region.

Almost the most useful publication for the ornithologist is one that appears so regularly, that, like the passing of summer and winter, it comes to be accepted as a matter of fact, and the expert knowledge and devotion to duty that are required to write it are apt to be overlooked. This is the 'Zoological Record,' edited by Sclater, and particularly Part 15,

Aves, entirely written by him, with the titles for 1929 of 1317 separate works concerning birds, and the conveniently arranged subject-index and the systematic notes.

Other recent publications of general interest are Lincoln on bird-banding, Longley on food of Terns, Wetmore's completion of the first volume of Swann's ' Birds of Prey,' and Witherby's guide to some ornithological work.

Most of the important literature of the past year relates to the avifauna of particular districts.

To Kirkman and Jourdain we owe an attractive book for the British Isles in general, and to Riviere a book for Norfolk, while Sheppard's Hull Musuem birds contains many Yorkshire notes and is noteworthy for being published at a price that really brings it within the reach of all ornithologists—fourpence.

Jesperson has written on the birds of the Atlantic, the important work of Lowe and Kinnear on the Antarctic notes and collection of Wilson has been published by the Trustees of the British Museum, and, under the auspices of the Egyptian Government, Meinertzhagen has brought out the two volumes of Nicoll's ' Birds of Egypt.'

In January 1930 the second part of the African ' Systema ' was issued, and Sclater has been able already to give additional notes on the subject in the October ' Ibis.'

Bannerman has finished the first volume of his ' Birds of Tropical West Africa,' and worked hard to complete this great work; we hope to see the second volume published by about October 1931. Life in tropical Africa is said to be very different now from what it has been in the past; certainly all residents in the western colonies will find life happier and healthier if they possess and read Bannerman's book, and then having acquired an interest in the subject, when they go out walking they can carry the ' Handbook of the Birds of West Africa ' by Bates, which has also appeared in 1930.

Friedman has had published the first part of his new work on the birds of Ethiopia and Kenya, and Chapin, in short papers, has given us more from his great store of knowledge of African birds.

Turning to Asia, we all congratulate Stuart Baker on the publication of the seventh and eighth volumes of his ' Birds of British India.'

The Zoological Society of London has in its possession many original water-colour paintings of Indian birds by Hodgson, Tickell, and Sharpe; these have been examined by G. Carmichael Low, with the help of Dewar, Newman, and Levett-Yeats, and an annotated list of the paintings published in the Society's 'Proceedings.'

Stresemann has given new information on *Pericrocotus* and *Turnix*, and, in conjunction with Bartels, a useful list of the 'Birds of Java.'

La Touche, by the issue of Part 5, has finished the first volume of his handbook to the 'Birds of Eastern China.'

Hachisuka is continuing his work on the birds of the Philippine Islands.

1930 has also seen the appearance of the second part of the Australian 'Systema' by Mathews, a new book on New Zealand birds by Oliver, and one on the birds of the interior of South America by Laubmann.

Part 2. Nomenclature.

Nomenclature, "which owing to its contentious nature I have studied to avoid" wrote Alfred Newton in 1896, is a subject from which there is no escape. At first sight it may appear nothing but a trying and tiresome *incubus* that has descended on innocent ornithologists in their sleep, but when fairly tackled it proves to be a subject in itself not only of interest, but also, now and again, of amusement.

Linnæus, believing that verbosity was the bane of science, condensed a nomenclatural chaos into working order by, in Newton's words, "assigning to each species a diagnosis by which it ought in theory to be distinguishable from any other known species, and of naming it by two words—the first being the generic and the second the specific term."

We all know that from at least 1842 some men have considered that the starting-point of nomenclature should be the tenth, and others that it should be the twelfth, edition of Linnæus. Now, both on the title and dedication pages of the tenth edition, 1758, the author gives his name as C. Linnæus, and on the corresponding pages of the twelfth edition, 1766, as C. a Linné, yet some firm upholders of 1758 invariably spell the author's name in the 1766 fashion.

In this year, 1930, the spirit of nomenclature has been stirring many able men.

At the Bristol meeting of the British Association both Calman and Hill took taxonomy as the subject of their presidential addresses to their sections. The complexities and technicalities brought into modern nomenclature, with the hosts of new words (*e. g.*, genoholotype, lectoparatype, etc., etc., *ad nauseam*), have harmful effects upon the progress of knowledge. As Bather says, " they have put to flight the amateur naturalist, whose kind has in the past taken so great a part in the advance of British science, and . . . created groups of specialists, who, retreating within the protective shell of their specialism, tend to see the world of life with narrow vision."

In ' The Ibis ' stimulating letters have been written by Congreve, C. B. Ticehurst, and G. Carmichael Low. Ticehurst affirms : " In course of time, matters will straighten themselves out" ; personally, looking back through the time from when the scientific names of birds first interested me, nearly fifty years ago, I feel, whatever confusion there may be in other groups of the animal kingdom, that in ornithology this straightening has already made very great progress, and *comparatively* few names remain at issue of uncertainty.

Genera.—This uncertainty, to all who are agreed on using the tenth edition of Linnæus, has its main origin in the question of the limits of genera, from the broad or " portmanteau " (as Oldfield Thomas used to say) genus to that with such a narrow opening that but one or more species can creep in.

P. R. Lowe, in his Chairman's address to this Club in 1928, gave us valuable advice on the problem of the genus, and the remarks of Lynes on *Cisticola* (especially pages 9–11) may serve as a model for other writers on other genera.

One practical point against the multiplicity of genera is the difficulty it creates when trying to name fossil bones, when a worker may well wish that all genera could be established on osteological characters.

Bowdler Sharpe used very many generic names, but it is useful to remember that he wrote in 1894 " the question of the alteration of *generic* names. . . It is better to face these changes fairly and squarely, and by their adoption, if they are found to be correct, to introduce a uniform system of nomenclature."

International Rules.—A second cause of uncertainty, mentioned by Ticehurst even before the difficulty of the limitation of genera, are the " International Rules."

An International Committee on Zoological Nomenclature is, in theory, the solution of nomenclatural difficulties, but, as now constituted, such a Committee's *ex cathedra* statements are binding on no one. The Committee issues " opinions " (which *are* opinions) which may be useful and helpful, but which may read like an involved legal document not meant for the understanding of the lay or common mind, or which may be so long worded that the ardent student of living things cannot afford the time that would be required to read them.

Then the Congresses pass resolutions, or make rules, by majority votes, not of qualified specialists or of the selected representatives of scientific societies and institutions, but of just those people who happen by geographical proximity or financial fortune to be able to be present at the Congress.

" The old naturalists believed that all species of animals were created as such by a divine *fiat* " (Gill, 1908, p. 469). Some modern zoologists believe that all species of animals can be given lasting scientific names by the *fiat* of an International Congress.

Species.—As late as 1894 Bowdler Sharpe found it necessary to write :—" We contend that when Linnæus, or any other of the Fathers, gave a (specific) name to a bird, no power on earth should be allowed to change it. . . The Linnean name, when perfectly capable of identification, as it generally is, should be held sacred."

Now we all agree on this. " Back to Linnæus " is a slogan for modern zoologists.

The difficulty that arises is—What is a species ?

Richards and Robson stated in 1926 :—" As no standard can be proposed by which species may be distinguished from varieties, there is no absolute criterion of species."

As an, at any rate tentative, answer to this question, Blanchard's definitions, 1924, may be quoted :—

Species, " a population of similar individuals of similar habits, freely interbreeding and maintaining a high degree of constancy in most superficial, as well as in all fundamental,

details throughout a generally considerable area. An unusual local emphasis on minor features is not regarded as of taxonomic significance."

Subspecis, " of the same nature as a species except that it intergrades with a closely allied race in a relatively narrow area where the two ranges adjoin."

Rules of Nomenclature.

Six simple " rules " are now suggested in the hope that they may be useful to young ornithologists, and in the devout hope that older ornithologists will find nothing " repugnant in the text " :—

1. The technical names for animals are in Latin (or latinized Greek), but are often " barbarous."

2. For convenience of arrangement the animal kingdom is divided and subdivided into groups of various comprehensiveness, the sequence of divisions being :—1. Class. 2. Order. 3. Family. 4. Genus. 5. Species. Intermediate and lower divisions, such as subclass, suborder, superfamily, subfamily, subspecies, variety, etc., are used by authors whenever they consider it advisable.

It must be remembered that as these divisions are artificial, their limits may vary according to the individual conceptions of authors.

The names for these divisions, or systematic groups, that are higher than genera have a plural termination. Family names end in *–idæ* and subfamily names in *–inæ*.

3. Generic names are of the singular number and are written with a capital initial letter.

4. Specific names are written with a small initial letter.

Originally specific names were made to depend grammatically upon the generic name, but the gender of many generic names being doubtful, different authors having held different opinions, and so many species having been transferred from genus to genus, it is now of no importance whether a species is called *albus* or *alba*, *niger* or *nigra*.

If uniformity is desired, there are reasons for preferring the feminine termination.

5. For genera and for species the first published name, with diagnosis by text or figure, is to be used. This is the law of priority.

6. The tenth edition of Linnæus, ' Systema Naturæ,' 1758, is taken as the starting-point of zoological nomenclature.

Author's names.—When a man by examining the type-specimen, the original description, or other study, has satisfied himself that the species he is writing about is the same species as that described by such and such an author, he is fully justified in placing the author's name after the specific name. The common habit of always adding an author's name is not only cumbrous, but has been, at any rate in the past, misleading, Linnæus, Blyth, Sykes, etc., etc., being copied from book to book as if it was part of the bird's name, often without any regard to what the quoted author himself meant ; and this habit has led to abbreviations of author's names and consequent mistakes in the names, even to the use of abbreviations by writers who do not know what the abbreviations stand for.

When it is necessary to mention an author, his initials should be given as well as his name. The failure to do this, even to-day, often causes trouble and loss of time in verifying facts, and as C. Davies Sherborn has said, it will get worse in the future, as the number of individual writers with the same surname steadily increases.

The name of the author of a specific (or subspecific) name should follow that specific (or subspecific) name without the intervention of a comma, but be printed in a different type.

The author's name should be placed in brackets when the original generic name he used for the species has been replaced by another.

Form.—Finally, seeing that the very useful word " form " is not understood by some young writers, it is necessary to quote Moulton's definition, 1910 :—

" The word ' form ' is used to include every described and named species, subspecies, race, or variety."

List of Literature referred to.

1. Baker, E. C. Stuart. Fauna of British India. Birds, ed. 2, vols. 7 & 8. 1930.
2. Bannerman, D. A. Birds of Tropical West Africa. Vol. 1. 1930.
Baldwin, S. P., see Lincoln.
3. Bartels, M., and Stresemann, E. Syst. Uebersicht der bisher von Java nachgewiesenen Vögel. Treubia, Buitenzorg, vol. 11, pp. 89–146. Aug. 1929.
4. Bates, G. L. Handbook of the Birds of West Africa. 1930.
5. Bather, F. A. What's in a name ? Nature, London, vol. 126, 3178, pp. 461–463. 27 Sept. 1930.
6. Blanchard, F. N. Key to the snakes of the United States, Canada and Lower California. Paprs. Mich. Acad. Ann Arbor, vol. 4, part 2. 1924.
7. Calman, W. T. The taxonomic outlook in zoology : from presidential address Sect. D (Zoology) British Association, Bristol, 4.9.1930. Nature, London, vol. 126, 3177, pp. 440–444. 20 Sept. 1930.
8. Chapin, James P. Eye-color as a subspecific character in *Colius striatus*. Fests. E. Hartert, pp. 174–183. J. Orn. Berlin, 1929, vol. 2.
9. Chapin, James P. Geographical variation in the African Scops Owl. Amer. Mus. Nov. N.Y. 412, pp. 1–11. March 1930.
10. Congreve, W. Maitland. Nomenclatural confusion. Ibis, London (12), vol. 6, p. 185. Jan. 1930.
Dewar, D., see Low.
11. Delacour, J. On the birds collected during the fifth expedition to French Indo-China. Ibis, London (12), vol. 6, pp. 564–599. Oct. 1930.
12. Eykman, C. European Anatidæ, an easy method of identifying swans, geese, and ducks. 15 plates. Valkenburg, Limburg, Holland. June 1930.
13. Friedman, Herbert. Birds collected by the Childs Frick expedition to Ethiopia and Kenya Colony. Part 1. Non-Passeres. Washington, D.C., 1930.
14. Gill, Theodore. Systematic zoology : its progress and purpose. Smithson. Publication No. 1842. Washington, D.C., 1908.
15. Hachisuka, M. Contributions to the birds of the Philippines, nos. 1 & 2. Tokyo, 1929, 1930.
16. Hartert, E. Festschrift Ernst Hartert zum siebzigsten Geburtstage gewidmet. Edited by Erwin Stresemann. J. Orn. Berlin, 1929, vol. 2.
17. Hill, A. W. Present-day problems in taxonomic and economic botany : from presidential address Sect. K (Botany) British Association, Bristol, 4.9.1930. Nature, London, vol. 126, 3178, pp. 476–479. 27 Sept. 1930.

18. Jesperson, P. Distribution of birds in the open Atlantic Ocean. Oceanographical results of the Danish Dana Expeditions, 1920–1922. No. 7. 1930.

Jourdain, F. C. R., see Kirkman.

Kinnear, N. B., see Lowe.

19. Kirkman, F. B., and Jourdain, F. C. R. British Birds. With 200 coloured plates. London (T. C. & E. C. Jack), 1930.

20. La Touche, J. D. D. Handbook of the Birds of Eastern China. Vol. 1 (completed). 1930.

21. Laubmann, Alfred. Wiss. Ergebn. Deuts. Gran Chaco–Exp., Vögel. Stuttgart, 1930.

Levett–Yeates, G. A., see Low.

22. Lincoln, Frederick C. Calculating Waterfowl abundance on the basis of banding returns. U.S. Dept. Agric., Circular 118. Washington, D.C., May 1930.

23. Lincoln, Frederick C., and Baldwin, S. Prentiss. Manual for bird banders. U.S. Dept. Agric. Misc. Publications 58. Washington, D.C., Nov. 1929.

24. Longley, W. H. Observations on Tortugas Fishes, especially those on which the Noddy and Sooty Terns feed. Yearb. No. 28, Carnegie Instit. pp. 288–290. Washington, D.C., 1929.

25. Low, G. Carmichael. Notes on Canada and the United States. Bull. Brit. Orn. Cl. London, 344, pp. 12–16. Oct. 1930.

26. Low, G. Carmichael. Nomenclatural confusion. Ibis, London (12), vol. 6, pp. 539–542. July 1930.

27. Low, G. Carmichael, Dewar, Douglas, Newman, T. H., and Levett-Yeats, G. A. A classification of the original water-colour paintings of birds of India by B. H. Hodgson, S. R. Tickell, and C. F. Sharpe in the library of the Zoological Society of London. Proc. Zool. Soc. London, 1930, pp. 549–625, with one map.

28. Lowe, P. R. Chairman's address, 14 Nov. 1928. Bull. Brit. Orn. Cl. London, 327, pp. 25–28. Dec. 1928.

29. Lowe, P. R., and Kinnear, N. B. British Antarctic ' Terra Nova' Expedition, 1910. Nat. Hist. Report : Zoology, vol. 4, no. 5, pp. 103–193. Birds. 1930.

30. Lynes, Rear-Admiral H. Review of the genus *Cisticola*. Ibis, London (12), vol. 6, Supplementary no., pp. 1–673, coloured plates 1–20. Oct. 1930.

31. Mathews, Gregory M. Systema Avium Australasianarum. Part 2. 1930.

32. Meinertzhagen, Col. R. Nicoll's Birds of Egypt. Vols. 1 & 2. 1930.

33. Moulton, J. C. Sarawak Museum, 9th Report, p. 6. 1910.

Newman, T. H., see Low.

34. Newton, Alfred. A dictionary of birds. London, 1893–1896. (See Preface, p. viii, Nov. 1896.)

35. Oliver, W. R. B. New Zealand Birds. Wellington, N. Z., 1930.
36. Richards, O. W., and Robson, G. C. Nature, London, vol. 117, 2941, p. 384. 13 March 1926.
37. Riviere, B. B. History of the birds of Norfolk. London (H. F. & G. Witherby), 1930.
Robson, G. C., see Richards.
38. Sclater, W. L. Systema Avium Æthiopicarum. Part 2. 1930.
39. Sclater, W. L. Some additional notes and corrections to Syst. Av. Æth. Ibis, London (12), vol. 6, pp. 677–679. Oct. 1930.
40. Sclater, W. L. Zool. Record, vol. 66, 1929. Part 15, Aves. London, 1930.
41. Sharpe, R. Bowdler. Handbook of the birds of Great Britain. Vol. 1. 1894. (See Preface, p. x.)
42. Sheppard, T. Guide to the birds in the Hull Municipal Museum. Illustrated. Ed. 2. Hull. Mus Publication No. 75, pp. 1–91. *Price fourpence.* 1930.
42. Stevens, H. Bull. Brit. Orn. Cl. London, 339, pp. 46–54. March 1930.
44. Stresemann, E. Beitr. zur Ornithologie der indo-australischen Region, 3. Mitt. zool. Mus. Berlin, vol. 15, pp. 635–645. Jan. 1930.
Stresemann, E., see Hartert.
Stresemann, E., see Bartels.
45. Swann, H. Kirke, and Wetmore, Alexander. Monograph of Birds of Prey. Part 8, Jan. 1930. Part 9, completing vol. 1, June 1930.
46. Ticehurst, Claud B. Nomenclatural confusion. Ibis, London (12), vol. 6, pp. 371–373. April 1930.
47. Van Oordt, G. J. Ornithological reservations in the Netherlands in 1930. Pp. 1–12. Leiden (E. J. Brill), 1930.
Wetmore, A., see Swann.
48. Witherby, H. F. A guide to some ornithological work. President's address delived at Norwich 30 April, 1929. Trans. Norfolk Norw. Nat. Soc. vol. 12, 1928–1929, pp. 527–549. 1930.
Yeats, Levett-, see Low.

Dr. Percy R. Lowe exhibited a hybrid example of a cross between *Lagopus scoticus* and *Tetrao tetrix*. He said that this bird belonged to Mr. Herbert Astley and that it was shot near Simonestone Hall, Hawes, Yorkshire. It was received in the flesh on October 14, 1930, by Messrs. Rowland Ward, who forwarded it to the British Museum with a request that we would determine its nature.

The specimen was a female and had not completed its moult. The above diagnosis was arrived at, and in addition it seemed probable that the cross resulted from the mating

of a cock Grouse and a "Grey Hen." Unfortunately, the bird was not weighed nor was its body preserved; but the outstanding facts about it as we saw it in the flesh were that it had the bulk and weight of a Grey Hen with the relatively small bill, short wings, legs, and feet of a Grouse. As regards what he might call the unit characters which constituted its "make up," he would like to point out that these were in no sense intermediate between the two parents. Although, for instance, the form and size of the wings were Grouse-like, the colour-pattern of the remiges was identical with that of a Grey Hen; that is to say, the *outer* webs of the primaries were mottled with pale greyish-buff as in the Grey Hen. Again, the legs, feet, and small Grouse-like toes were entirely feathered like a Grouse, except where the feathers had worn and had not been renewed on the distal end of the toes; while the tail, in addition to the barring of the rectrices (as in the Grey Hen), had the adumbrated shape of the Black Cock's, also characteristic of the Grey Hen. The rectrices were also tipped with whitish, a Grey-Henish character, and the under tail-coverts had the colour and colour-pattern characteristic of the females of the genus *Tetrao*. On the other hand, it might be said that the general character of the body plumage was Grouse-like as opposed to being characteristic of the Grey Hen.

It was this purity and segregation of the unit characters which struck one as being so interesting and which seemed to point the way to an explanation of the germinal mechanism by which the whole "make up" of this hybrid came into being.

They also seemed to indicate how fundamentally important it was to carefully examine and analyse the constituent characters of all hybrids; because by doing so it seemed likely that a strong side-light would be thrown upon the problem of how species came into being, and, incidentally, to point to the minor part, if any, which environment and the factor of adaptation had played in their creation.

Dr. G. Carmichael Low contributed a note on rare Grebes and other birds in the London district during the early part of December 1930. He said Mr. A. Holte Macpherson had had the experience, unique to a field ornithologist, of seeing all the British species of Grebe in one day (Saturday,

December 6, 1930), and he himself had the great fortune of equalling the record the next day (Sunday, December 7, 1930). The record was :—

1. Black-necked Grebe (*Podiceps nigricollis nigricollis*). 1. — Long Water, Kensington Gardens.
2. Great-crested Grebe (*Podiceps cristatus cristatus*). 40 odd.
3. Red-necked Grebe (*Podiceps griseigena griseigena*). 1.
4. Slavonian Grebe (*Podiceps auritus*). 3.
5. Little Grebe (*Podiceps ruficollis ruficollis*). 1.

— Staines Reservoir.

The Black-necked Grebe on the Long Water, Kensington Gardens, was discovered by Mr. A Holte Macpherson on Wednesday morning, December 3, 1930, and stayed till Sunday, December 7, 1930.

In addition to the four species of Grebe seen by himself and Mr. Macpherson on Staines Reservoir on Sunday, December 7, 1930, there were also two Great Northern Divers (*Colymbus immer immer*), 20 odd Goosanders (*Mergus merganser merganser*), 15 of these being adult males in winter plumage, one Smew (*Mergellus albellus*), a brown-headed bird, and countless Duck of all sorts, amongst the rarer of these being the Golden-eye (*Bucephala clangula clangula*) and Shoveler (*Spatula clypeata*).

Dr. Carmichael Low also reported that on Saturday night, December 6, 1930, while waiting for Duck in the evening at a small pond near Langley, Slough, Bucks, he shot a young male Goosander (*Mergus merganser merganser*) in its first winter plumage. The bird was one of three which came in in the dark and was killed in mistake for a Mallard. It weighed 3 lbs. 6 ozs. It is not clear what they were doing there, as the water in the pond is only a foot or so in depth and there are no fish or frogs present. On examining the bird afterwards its throat seemed to be bulging, and on pressure a small roach, eight inches in length and a quarter of a pound in weight, was recovered. The birds must have come from Staines Reservoir.

The above forms an interesting record for Buckinghamshire.

The place where the bird was shot was the same as that in which the White-fronted Goose was obtained on February 16, 1929 (Bull. B. O. C. xlix. 1929, p. 67 : id. 'British Birds,' xxii. 1929, pp. 325–326). He had presented the bird to the British Museum (Natural History).

Mr. Charles Oldham congratulated Mr. Holte Macpherson and Dr. Carmichael Low on their great good fortune in seeing the five species of British Grebe in one day. He said he had had almost the same experience once. At Tring one winter he saw, at one time, all the species with the exception of the Black-necked Grebe. He hoped the latter would join the others later, but, before it did, the Slavonian and Red-necked Grebe had gone.

As regards rare birds seen at Tring lately, in the first week in December there were present an adult Great Northern Diver moulting into winter plumage, three Black-necked Grebe, one female Common Scoter, and two female Velvet Scoter.

Mr. E. C. Stuart Baker showed two series of eggs, one of the Greenshank (*Tringa nebularia*) and one of the Jack Snipe (*Lymnocryptes minima*), in order to prove the great difficulty of defining the type of any particular species of the Charadriiformes. He said that sometimes one was shown alleged clutches of eggs of very rare birds together with clutches of the forms most nearly allied to them. Differences between these particular clutches were pointed out, and were held to be sufficient to guarantee the authenticity of the rarer of the two. The series exhibited, he said, showed how impossible it was to lay down laws as to types and methods of differentiation between the eggs of allied forms.

Mr. H. M. Wallis exhibited a copy of the Bulgarian British Review containing an account, by Henry W. Shoemaker, American Minister at Sofia, of King Boris the Third as a naturalist. In this it was stated that Lammergeyers had bred in King Boris's garden for the past sixteen years, the only place where this species has hatched in captivity.

Mr. J. Delacour gave an account of the Franco-British-American Expedition to Madagascar, which started in April

1929 under his leadership. The Expedition was rendered possible mainly by the generosity of Messrs. Archbold and Vernay, and is being conducted in the interests of the British, French and American Museums. Collectors are still in the field and will carry on for several months.

So far nearly 10,000 birds have been collected, and an unrivalled series has been obtained from most parts of the island, including some of the rarest forms such as *Thamnornis*, *Dromœcercus seebohmi*, *Philepitta schlegeli*, etc.

He also exhibited a specimen of a remarkable new Warbler, *Randia pseudo-zosterops* and of the rare *Hartertula*.

A description of this new bird and other striking new birds will appear in the January number of 'l'Oiseau.' This Madagascar collection will be worked out by Messrs. Berlioz and Delacour, and will be equally divided between the London, Paris, and New York Museums.

Mr. J. Delacour also exhibited an adult male of *Oriolus mellianus* Stresemann which he had recently received from the Sunyatsen University Museum, in Canton, through the kindness of Professor S. S. Sin. Up to this year the adult male had remained undiscovered, only females and immature males having been received in Europe.

When visiting Canton in February of this year, he was astonished to see some specimens of the wonderfully coloured adult male. A description was given in 'l'Oiseau' last year, and the bird will be figured in one of the next numbers of the same publication. This Oriole is allied to *O. ardens*, having the comparatively short and thick bill. It has been found in the Yaoshan Mountains and in Khonang-si; a female was also obtained in Cambodia in winter at Bokor (3000 ft.); it may be found that this bird belongs to a slightly different race.

The Hon. M. Hachisuka exhibited a specimen of *Phasianus* mut. *tenebrosus*; the entire colour of the body was metallic violet blue and in different lights a green sheen was observed.

He remarked that in 1929, in his aviary in Tokyo, he had crossed this type of bird with the female of *Chrysolophus pictus* mut. *obscurus*, and he exhibited drawings of their offspring; they looked very much like the cross between the

normal type of Pheasant (*Phasianus colchicus*) and the Golden Pheasant (*Chrysolophus pictus*), the difference being that they were much darker.

He further announced that the adult plumage and the spur were assumed in the first year in the hybrids which he bred, this being a character of the genus *Phasianus*.

The Hon. M. Hachisuka also exhibited a drawing of an albino Ground-Pigeon (*Gallicolumba criniger*) from the Philippines which he had in his possession. The interesting point about this exhibit was that, in spite of the bird having entire white plumage, the red patch on the breast remained as in the normal bird. He remarked that the red coloration appears to be dominant and seldom changes, similar cases being the Grey Parrot (*Psittacus erithacus*) with red under tail-coverts, and the Black Woodpecker (*Ceophlœus pileatus*) having the crest red.

A specimen of an albino Cuckoo (*Centropus bengalensis javanicus*) from Bulacan, Luzon, obtained by himself during his recent expedition to the Philippines, was exhibited. The two exhibited specimens are being presented by him to the British Museum (Natural History).

Mr. Charles Oldham remarked that he knew of a similar case of an albino Red-vented Bulbul (*Molpastes hæmorrhous bengalensis*) retaining the normal red under tail-coverts. The bird was in the Zoological Gardens. He also said that albino cock Bullfinches (*Pyrrhula pyrrhula*) retain the red on the breast.

Mr. G. L. Bates sent the following descriptions of new birds from West Africa. For permission to publish these descriptions he said he desired to express his thanks to the Trustees of the British Museum (Natural History).

Mirafra africana henrici, subsp. nov.

A dark race of the Rufous-naped Lark; feathers of the upper side with wide black middles and narrow lighter edges; the latter are greyish except on head, where they are rufous. Under side deep buff; black mottling of breast heavy and extensive. This race is darker and less reddish than *Mirafra kurræ* or *M. stresemanni*, the head feathers showing more black than rufous.

Measurements. 1 ♂ adult. Wing 94, tail 62 (outer feathers —tail emarginate), tarsus 27, bill 18·5 mm.

Type in the British Museum, ♂ adult, in worn plumage; from near the foot of Mt. Nimba in French Guinea, altitude 2000 ft., May 23, 1930, collected by G. L. Bates, no. 10147. Brit. Mus. Reg. no. 1930.12.3.2.

Remarks. Another specimen in juvenile plumage obtained, considerably smaller than adult described. A plate (Ibis, 1924, p. 199) shows the nearest allies, viz., *Mirafra kurræ* and *M. stresemanni*. I name the race in honour of Mr. Henrik Grönvold, the well-known artist, who was responsible for the above plate.

Anthus richardi bannermani, subsp. nov.

Darker even than *cameroonensis* and *lynesi* (the darkest races of Richard's Pipit hitherto known); the light edges of the feathers of the upper side narrow, leaving most of each feather black. Ground-colour of under side of a deep buff colour, in shade between those of *lynesi* and *cameroonensis*, with black mottling on the breast heavier and more extensive than in either of those races.

Measurements. Size small; wing 82·5–85·5, tail 62–70, tarsus 24–26, bill 14–15·5 mm. (Four specimens measured, those among them showing some of the juvenile plumage not smaller than the fully adult male.)

Type in the British Museum, ♂ adult; from the slopes of Birwa Peak, Kono District, Sierra Leone, alt. 4800 ft.; July 18, 1930, collected by G. L. Bates, no. 10295. Brit. Mus. Reg. no. 1930.12.3.1.

Remarks. No form of Richard's Pipit known before nearer to Sierra Leone than the mountains of Cameroon, where both forms mentioned above were found; but I got one specimen of the new race also on Mt. Nimba in French Guinea, and two others in French Guinea in a rocky place at a not very high altitude. I name this bird in honour of Mr. David Bannerman, from whom I received much help in arranging for my collecting trip.

Ptyonoprogne obsoleta birwæ, subsp. nov.

Darker than *P. obsoleta rufigula* from Kenya (*terra typica*) and other parts of Africa north of the Equatorial Forest.

Throat and crop feathers more deeply tinged with cinnamon and having more distinct dark shaft-streaks or lines. The new race resembles *P. o. bansoensis* from the mountains of Cameroon in the dark colour and deep cinnamon throat; but in that race the throat feathers are almost without shaft-streaks.

Measurements. Wing in three specimens 108–113 mm.

Type in the British Museum, ♂ adult; Kulikoro, French Sudan; July 10, 1928, collected by G. L. Bates, no. 9687. Brit. Mus. Reg. no. 1930.3.4.1.

Remarks. The type specimen was obtained on a former journey at a rocky cliff overlooking the Upper Niger. I got two more specimens just like the first one on my recent trip on the side of Birwa Peak in Kono District, Sierra Leone.

Note.—I follow Lynes in making *rufigula* a subspecies of *obsoleta* (*vide* Ibis, 1926, p. 402).

Hirundo daurica disjuncta, subsp. nov.

Under side deep rufous-buff (instead of white or buffy white as in the commonest form of the Red-rumped Swallow in West Africa, *H. d. domicella*). In this the new race is like *H. d. kumboensis*; but the single specimen obtained is not as large as in that race.

Measurements. Wing 111·5; tail 44 (middle feathers), 85 mm. (outermost feathers).

Type in the British Museum, ♀ adult; from the side of Birwa Peak, Kono District, Sierra Leone, alt. 4700 ft.; July 15, 1930, collected by G. L. Bates, no. 10286. Brit. Mus. Reg. no. 1930.12.3.3.

Remarks. This is another dark race like *H. d. kumboensis*, inhabiting high altitudes on the southern border of the range of the light *domicella*. The smaller size of the single specimen would not justify its separation from *kumboensis*, were their ranges adjacent. But the wide geographical separation, with no mountains between it, makes it necessary to assume independent evolution.

Malaccincla rufipennis extrema, subsp. nov.

Compared with *M. r. rufipennis* from Gaboon (*terra typica*) and Cameroon, the new race has the plumage of the upper side,

in adults, more tinged with rufous, especially on the head, which is not darker than the back (as it is in the other races of *M. rufipennis*). The light middles to the feathers of the forehead (which in *M. r. rufipennis* are greyish) are in the new race rufous. Size apparently a little smaller than in the Gaboon and Cameroon race.

Measurements. Type specimen: wing 72, tail 54, tarsus 24·5, bill 15·5 mm. Two adult females: wing 68, 69·5 mm.

Type in the British Museum, ♂ adult; from near Nzerekoré, French Guinea; May 15, 1930, collected by G. L. Bates, no. 10117. Brit. Mus. Reg. no. 1930.12.3.8.

Remarks. Besides the three adults mentioned, I obtained three immature birds, which are more rufous than the adults, and are also a little mottled on the back by bright rufous middle streaks to some of the feathers. The localities of these six specimens were in forested districts in eastern Sierra Leone and the adjacent parts of French Guinea. This species has not been recorded from farther west than Cameroon.

Note.—I use the name *Malacocincla* as uniting the African species in the same genus as the Indian ones, instead of *Illadopsis*, used for the African species in Sclater's 'Systema Avium Æthiopicarum.'

Cisticola emini admiralis, subsp. nov.

Described in Lynes's 'Review of the genus *Cisticola*' (p. 313) from a single specimen as "d. *Cisticola emini* of the French Sudan. A very rich, deeply coloured edition of the Summer dress of *petrophila*." Further recent specimens obtained from the Sierra Leone mountains are like the French Sudan bird, being quite as deeply coloured.

Measurements. All these specimens show a slightly smaller size than in *petrophila*: the one male measures, wing 59, tail 53, tarsus 22, bill 12·5 mm.; the three females, wing 50–51·5, tail 48–49, tarsus 20–21, bill 12–12·5 mm.

Type in the British Museum, ♂ adult; from a cliff near Kulikoro, French Sudan; July 9, 1928, collected by G. L. Bates, no. 9682. Brit. Mus. Reg. no. 1930.3.4.2.

Remarks. The three recent specimens, obtained among the rocks near Birwa Peak at an altitude of about 4500 ft.,

though in the month of July, were in worn winter dress, with the " rusty buff suffusions " (Lynes's mark of the winter dress of *petrophila*) very noticeable on the under side.

Prinia leontica, sp. nov.

Whole upper side ashy grey, the head feathers with indistinct dark middles and light edges ; remiges and rectrices brownish, both with very slight whitish tips, the rectrices also with obscure dark subterminal spots, and the remiges also with narrow sandy buff edgings. Sides of head, throat, and breast grey, a little lighter than the back, the grey breast passing into whitish on the middle of the belly, and sandy buff on the flanks, legs, vent, and under tail-coverts ; under wing-coverts buff, but outer ones and edge of wing at the bend white. Bill entirely black ; feet flesh ; iris cream-white.

Measurements. Wing, six males 53·5, two females 52 ; tail, males 52–55, females 49 ; tarsus 21–22·5 ; bill 13–14 mm.

Type in the British Museum, ♂ adult ; from a ravine near Birwa Peak, Kono District, Sierra Leone, alt. 4500 ft. ; July 19, 1930, collected by G. L. Bates, no. 10303. Brit. Mus. Reg. no. 1930.12.3.4.

Remarks. This new species has the characters of the genus *Prinia*, including the number of the rectrices, which I ascertained in every case in the freshly-killed birds to be ten. My specimens were collected in thickets bordering the streams of north-eastern Sierra Leone and the adjacent parts of French Guinea. The bird was found at different altitudes, but seemed to be commonest in the ravines of the mountains. Its behaviour was that of a *Prinia*, dodging about in the bushes and cocking its tail—often in parties of several individuals.

Saxicola torquata nebularum, subsp. nov.

A rather small and deeply-coloured race of the Stonechat. The male with breast deep chestnut-red, this colour extending far down the breast and on the flanks, leaving only the belly white, besides a small white patch on each side of the crop. Female also with the breast deeply tinged with red.

Measurements. Wing in five males (the immature specimens not smaller than the adults) 67–69 ; in four females

65–67 ; tail (all) 51–53 ; tarsus 20·5–21·5 ; bill 12–14 mm. (12 in most).

Type in the British Museum, ♂ adult in fresh plumage ; from near Birwa Peak, Kono District, Sierra Leone, alt. 4500 ft. ; July 13, 1930, collected by G. L. Bates, no. 10277. Brit. Mus. Reg. no. 1930.12.3.5.

Remarks. I found these Stonechats only on the mountains which I ascended of over 4000 feet, but on all of them, Bintumane, Birwa, and Mt. Nimba in French Guinea ; there the birds live almost constantly in mists. The nearest known representatives of this species are those found on the mountains and highlands of Cameroon.

Andropadus curvirostris leoninus, subsp. nov.

Compared with *A. curvirostris* from the Camma River near Gaboon (*terra typica*), Cameroon, Iju near Lagos and Gold Coast, the new race has a slightly greyer throat and perhaps a yellower belly, and certainly a darker tail, which contrasts with the rest of the plumage.

Measurements. Adult male (the type) : wing 76·5, tail 72, bill 14. Wing in two females 71, 72 mm. ; bill of one of the females 15 mm. These measurements agree with those of the smallest of the Cameroon birds.

Type in the British Museum, ♂ adult ; from Buedu, near Kailahun, at the extreme east of Sierra Leone ; April 12, 1930, collected by G. L. Bates, no. 9980. Brit. Mus. Reg. no. 1930.12.3.7.

Remarks. My other specimens were obtained one in the eastern part of Sierra Leone, the other near Nzebela in French Guinea. No examples of this species are in the British Museum collection from farther west than the Gold Coast, though Büttikofer found it in Liberia.

It is noteworthy that a similarly darker tail distinguishes the western race of another allied species, *Andropadus latirostris.*

Cinnyris (Cyanomitra) olivaceus cephaëlis, subsp. nov.

Description. Most like *C. olivaceus obscurus* from Fernando Po, but with the under side darker and more greenish (in

obscurus the under side is very pale, almost greenish white). Distinguished from *C. o. guineensis* of Liberia, Sierra Leone, and Portuguese Guinea by the colour of the bill (which in that western race is entirely black or with only a little light yellowish colour on the edges of the lower mandible, which are overlapped by the upper). Colour of the bill in the new race here described black, but basal half of lower mandible light buffish flesh, fading to whitish in old specimens. Size intermediate between *obscurus*, which is larger, and *guineensis*.

Measurements. 14 adult males from S. Cameroon, wing 60–64; 10 adult females 55–58 (against 58–62 in 19 adult males and 53–55 mm. in 5 adult females from Liberia, Sierra Leone, and Portuguese Guinea).

Type in the British Museum, ♂ adult; from Bitye in Southern Cameroon; March 20, 1924, collected by G. L. Bates, no. 7710. Brit. Mus. Reg. no. 1930.12.4.1.

Remarks. When Bannerman separated all the continental West African Olive Sunbirds from the Fernando Po ones (Bull. B. O. C. xli. 1921, p. 135), naming them *guineensis*, he designated a specimen from Nanna Kru, Liberia, as type. The wholly black bill in birds from the extreme western part of West Africa makes them look very different from those from Cameroon. Birds from the Gold Coast seem to be intermediate.

The name I have given the Cameroon race of Olive Sunbird is that of a flowering shrub or tree of wet places in the forest, *Cephaëlis mannii*, on the flowers of which this Sunbird feeds.

Cinnyris cyanolæmus magnirostratus, subsp. nov.

Plumage of a darker shade, both on the upper side and on the breast, than in *C. cyanolæmus* from Fernando Po (*terra typica*) and from Cameroon and the Gold Coast; this is seen in the one female specimen examined as well as in the males. Length of wing not very different (judging from the few specimens), but bill longer, larger, and slightly less curved.

Measurements. Bill in three males 24 to 26 mm., as against 21·5 to 24 in Gold Coast males and 21 to 23 mm. in Cameroon birds.

Type in the British Museum, ♂ adult; from Sandaru, Kono District, Sierra Leone; June 18, 1930, collected by G. L. Bates, no 10198. Brit. Mus. Reg. no. 1930.12.3.6.

Remarks. I obtained four specimens of this Sunbird in the eastern extremity of Sierra Leone and the adjacent parts of French Guinea. This species is not represented in the British Museum from farther west than the Gold Coast, but Reichenow gives two old records, "Sierra Leone (*Marche*)" and "Galam (*Paris Mus.*)."

Estrilda astrild kempi, subsp. nov.

Compared with *E. a. occidentalis* from Fernando Po (*terra typica*) and Cameroon, this Sierra Leone race has less of the general rufous-brown suffusion in the plumage, so that the light parts look whiter and the darker parts blacker, the barring is more distinct, and the contrast of the black vent and tail is more marked.

Measurements. Size a little smaller. 16 Sierra Leone birds measured, wing 44–47 mm. (against 48 in one adult Fernando Po bird and 45–48 mm. in many S. Cameroon birds—sexes of the same size).

Type in the British Museum, ♂ adult; from Buedu, near Kailahun, Sierra Leone; April 16, 1930, collected by G. L. Bates, no. 10022. Brit. Mus. Reg. no. 1930.12.3.9.

Remarks. Besides my recent specimens from Sierra Leone, there is in the British Museum a large series collected by Robin Kemp at Bo. He noticed the distinctness of the Sierra Leone birds and remarked on it in his paper (Ibis, 1905, p. 243).

NOTICES.

The next Meeting of the Club will be held on Wednesday, January 14, 1931, at PAGANI'S RESTAURANT, 42–48 Great Portland Street, W.1. The Dinner at 7 p.m.

Members intending to dine are requested to inform the Hon. Secretary, C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W.7.

Members who intend to make any communication at the next Meeting of the Club should give notice beforehand to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W.1, and give him their MSS. for publication in the 'Bulletin' not later than at the Meeting.

Bird Room

PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCXLVII.

The three-hundred-and-forty-second Meeting of the Club was held at Pagani's Restaurant, 42–48 Great Portland Street, W.1, on Wednesday, January 14, 1931.

Chairman : Major S. S. Flower.

Members present :—Miss C. M. Acland ; W. Shore Baily ; E. C. Stuart Baker ; F. J. F. Barrington ; Miss M. G. S. Best ; P. F. Bunyard ; Hon. G. L. Charteris ; H. P. O. Cleave ; Sir Percy Z. Cox ; R. H. Deane ; Lt.-Col. A. Delmé-Radcliffe ; A. Ezra ; Miss J. M. Ferrier ; Rev. J. R. Hale ; Col. A. E. Hamerton ; Dr. J. M. Harrison ; Mrs. T. E. Hodgkin ; Miss D. Hordern ; Rev. F. C. R. Jourdain ; N. B. Kinnear ; Miss E. P. Leach ; B. Lloyd ; Dr. G. Carmichael Low (*Editor*) ; Dr. N. S. Lucas ; C. W. Mackworth-Praed (*Hon. Sec. & Treas.*) ; T. H. McKittrick, Jr. ; Dr. P. Manson-Bahr ; G. M. Mathews ; Mrs. D. Micholls ; T. H. Newman ; C. Oldham ; B. B. Osmaston ; F. R. Ratcliff ; C. B. Rickett ; D. Seth-Smith ; Major A. G. L. Sladen ; Marquess of Tavistock ; Dr. A. Landsborough Thomson ; Miss E. L. Turner ; H. F. Witherby ; C. R. Wood ; C. de Worms.

Guests :—Miss Joyce Baily ; Miss E. J. Delme-Radcliffe ; J. P. R. Hale ; P. E. C. Manson-Bahr ; Dr. Ernst Mayr ; A. Micholls.

Dr. Ernst Hartert and Monsieur Louis Lavauden sent the following notes :—

The bird described as *Thamnornis chloropetoides* by Grandidier (Rev. et Mag. Zool. 1867 p. 256) from a specimen shot near the Cape Ste. Marie, South Madagascar, seems until now to have remained unique. On June 28, 1929, one of us obtained a specimen at Amboronosy, north of Tuléar, which agrees with the description and plate 128 of Alfred Grandidier's 'Hist. Nat. de Madagascar, Oiseaux.' The sex was not determined. Wing 63·5 mm., tail 68 mm. The tail is graduated, the lateral pair of feathers being 13 mm. shorter than the central pair ; the tips of the lateral rectrices are paler. The figure on plate 128 is fairly good, but the rectal bristles are not visible in the skin.

A female of a new subspecies of *Nesillas typica* (Hartlaub) was discovered on the top of the mountain Tsaratanana, about 2,750 metres high, in October 1929. It is larger than *Nesillas typica typica*, has a longer tail, and a more greenish tinge of colour above and below. The upper-side is deep brown, with a faint greenish-olivaceous tinge. The underside is very light whitish-green along the middle, the sides and some dull longitudinal spots on the throat greenish-olivaceous brown. Bill from base 15·5, wing 69, tail 96·5, tarsus 36 mm. We name this form :

Nesillas typica monticola, subsp. nov.

Type in Monsieur Lavauden's collection.

Captain C. H. B. Grant sent the following note :—

In the 'Bulletin' of the British Ornithologists' Club, xlvii. 1927, p. 126, I published a short note on the Angolan Swallow (*Hirundo angolensis angolensis*) and on the Grey-headed Gull (*Larus cirrocephalus*, now known as *Hydrocolœus cirrocephalus phœocephalus*), and I now send a further note on both these birds, as I feel sure it will be of interest to ornithologists.

I resided at Kigoma between 1925 and 1929, but it was not until 1927 that the Angolan Swallow put in an appearance, although I had kept a very sharp look out for it, having obtained it at Kasulu (misspelt Kasauli in W. L. Sclater's

'Systema Avium Æthiopicarum,' part ii. 1930, p. 575) in 1924, and seen another pair at that place on a one-day visit there on August 2, 1927. A pair were first seen at Kigoma on November 11, 1927, and a few were seen at odd times up to January 5, 1928. This Swallow again appeared on April 16, 1928, and was seen in twos and threes only, up to June 6, 1928, and again in April 1929. Three pairs started to nest in one of the houses in 1929, but were driven out by the occupier. I obtained three specimens for the British Museum on April 1 and 21, 1929. Kigoma, therefore, constitutes a new locality for this species.

As regards the Grey-headed Gull, I am now satisfied that it does not migrate, that is to say, that the late Charles Grey (who kept notes of its presence) and myself have now seen it in every month of the year, and in certain places, in particular on rocks at Sumbwa Point, it is always to be seen in large numbers. This, therefore, appears to dispose of the view that it leaves Lake Tanganyika for breeding purposes; and yet during all the years I was stationed on the Lake I failed altogether to learn anything of its breeding-habits, except that I was told, on two separate occasions, that it had bred in the swamps in colonies and that it bred in pairs in holes in the ground. There was certainly no sign of any breeding-places in any of the swamps I visited, and all the local fishermen and coast-dwellers assured me that they had never seen its egg and had no idea where it nested.

The late Charles Grey also made extensive enquiries. I spread the news all up and down the Lake Littoral that I would give 5/- for every egg brought to me, and yet this very handsome offer produced nothing. The breeding-habits, of this Gull on Lake Tanganyika are, therefore, still a mystery, but its breeding-habits on Lake Naivasha have been well described by Mearns (Bull. 153, U.S. Nat. Mus. 1930, p. 195), a copy of which the author has kindly sent me, and, had the Government stationed me at Kigoma on my last return from leave, I should have prosecuted further search for the nest of the Gull in the fringes of the papyrus swamps.

Mr. G. M. Mathews showed a sparrow-pot, a vase-shaped vessel of red earthenware, similar to some on the wall of

Sparrow-pot Lodge, a cottage in Cassiobury Park, Watford, Herts, and to others on an old stable wall in that town.

Mr. C. Oldham, who showed a similar vessel, made at a brick-yard in Thorney Fen, Cambs, and used with others on a farm-building there, stated that these sparrow-pots, or sparrow-bottles, were at one time in common use in London, the Home Counties, and elsewhere in the south-east of England, but were now rarely to be seen. One-half of the base, the part apposed to the wall, is wanting, and the existing half is notched so as to rest easily on a peg or nail. The lip and neck are pierced and slotted for the insertion of a perch, which projected below and beyond the mouth of the vessel when it was hung on a wall. The dimensions of the two pots exhibited are :—

	Height.	Greatest width.	Inside diameter of neck.
Watford	5·9 in.	5·5 in.	2·6 in.
Thorney Fen	7·3 „	5·8 „	1·7 „

The construction and position of a pot clearly furnished easy access to the nest when it was removed from the peg, but the original intent and purpose of the vessels is uncertain. It has been suggested that by providing convenient quarters they diverted Sparrows from nesting in and destroying thatched roofs or prevented the birds from blocking spouts or fouling walls and windows with their excreta; or again, that they provided an easy means for rearing Sparrows in order that head-money might be claimed from churchwardens (Meade-Waldo, Bull. B. O. C. xxi. 1907, p. 19, and Ticehurst, 'History of the Birds of Kent,' pp. 148–9). Mr. Oldham doubted whether any of these, and particularly the last, was their original purpose, for they were often represented in old Flemish paintings and engravings, and in some English ones, *e. g.* (Francis Barlow's etchings in a 1666 edition of Æsop's 'Fables') at a period antecedent to the payment of head-money for Sparrows by parish authorities. He suggested as more likely the rearing of Sparrows for food by cottagers and others in times when fresh meat was a rare and expensive item of their dietary.

Dr. E. Mayr forwarded the descriptions of two new subspecies from the Snow Mountains of New Guinea :—

Ptiloprora plumbea granti, subsp. nov.

Differs from typical *plumbea* Salvadori (mountains of S.E. New Guinea) by the generally darker coloration and larger size. The black shaft-streaks on head and back are much broader and the grey of the upper and underside is dark instead of pale.

Type in the British Museum, ♂ adult ; Camp 6 *c*, Utakwa River ; February 20, 1913. C. B. Kloss Coll. Brit. Mus. Reg. no. 1916.5.30.504.

Remarks. I name the new bird in honour of the late Mr. Ogilvie-Grant, who had already noted the larger size of the Snow Mountains bird, and gave the measurements (Ibis, Suppl. ii. 1915, p. 75).

Pachycephalopsis hattamensis axillaris, subsp. nov.

Hartert recently described (Nov. Zool. xxxvi. 1930, p. 57) the Wandammen form of *hattamensis* as being darker than the typical Arfak form. The birds of the Snow Mountains are, on the contrary, lighter.

Underneath they are distinctly lighter than *hattamensis*—more of a yellowish-olive colour—especially in the middle of the belly. The axillaries are about the same tint, and not pure isabelline as in the typical form.

Type in the British Museum, ♂ adult ; Camp 6 *a*, Utakwa River, Dutch New Guinea, January 6, 1913. C. B. Kloss Coll. Brit. Mus. Reg. no. 1916.5.30.245.

Dr. G. Carmichael Low reported that on Sunday, January 11, 1931, in company with Mr. A. Holte Macpherson and Dr. Manson-Bahr, he saw a brown-headed Smew (*Mergellus albellus*) at Barn Elms, a white bird and two brown-headed ones on the long reservoir, Lonsdale Road, Barnes, and ten together (five adult white males and five brown-headed birds) on one of the Hampton reservoirs, the small one, visible from the road. He thought such a large number of this somewhat rare bird was more or less unique, and did not know of any other part of Britain where so many could be seen together at any one time.

Mr. H. P. O. Cleave said that, in company with two other observers, he had seen six Smew, all brown-headed birds, on Virginia Water on Friday, January 9, 1931.

Mr. A. G. L. Sladen said that in 1915, while at Coldstream, Scotland, Smew were quite common on the Tweed there, many being adult males.

Mr. P. F. Bunyard exhibited five clutches of five eggs of the Rock-Pipit, *Anthus petrosus*, from Kincardineshire, Scotland; also three clutches of five eggs each, two clutches of four each, and one of three from Yorkshire, and made the following observations :—

In 1919 he received a few clutches of Rock-Pipit's eggs from Scotland, and was at once struck by their large size; this year he received a further small series, which he found equally large.

The weights and measurements, especially the former, led him to suspect that the Scotch bird may possibly prove to be a larger race than the English bird. It would be necessary to compare birds in breeding-plumage, as there is a partial southward migration in the autumn ('List of British Birds—B. O. U.' second edition, 1915, p. 49.)

Dr. Rey gives the average measurements of eight eggs as 21·5 × 15·8 mm. and the weights as 155 mg. ('Die Eier der Vögel Mitteluropas,' i. 1900, p. 266). The origin of these eggs was not stated; possibly they belonged to the Scandinavian form *Anthus petrosus littoralis*, which apparently he did not recognize. It will be seen from the figures below that Rey's figures come very near to the Scotch eggs, but are of little consequence owing to the small number measured.

The measurements given in the 'Practical Handbook of British Birds' are in this case of no value for comparison, as probably Scotch and English eggs are included in the average, 21·3×15·9 mm., for 100 eggs.

There is a very large series of eggs in the British Museum of Natural History from the Faroes under *A. obscurus* which refers to the British bird. The Faroe bird is now separated under the name of *A. s. kleinschmidti*, consequently the

measurements are of no value, as the figures given may be for either or both species.

If there is sufficient material available, it would be interesting to compare the skins of the Faroe bird with those of the Scotch.

In 1905 it was too late for eggs in the Faroes, and only one clutch of rather highly incubated eggs was collected, this being given to Mr. Jourdain. As far as he could recollect, these did not differ in size from English eggs, but he found, on the average, the Scotch eggs were more richly marked than the latter.

The following table gives the average measurements and weights of the series :—

Average measurements (*P. F. Bunyard's*).

25 eggs from Scotland.	25 eggs from Yorkshire.
21·9×16·2 mm.	20·7×15·8 mm.
Max. .....22·8×16·2 „	Max. .....21·8×16 „
Min. .....20·4×16 „	Min. .....19·8×15·8 „

Average weights (*P. F. Bunyard's*).

25 eggs from Scotland.	25 eggs from Yorkshire.
157 mg.	138 mg.
Max. ..... 172 „	Max. ..... 163 „
Min. ..... 139 „	Min. ..... 91 „

In the box exhibited, the Scotch and Yorkshire eggs were separated by two clutches of five of the erythristic variety. These were also from Scotland, and, strangely enough, were also large. This variety, so far as he was aware, did not occur below the border.

The Rev. F. C. R. Jourdain stated that the erythristic variety of eggs of the Rock-Pipit had occurred not only in Scotland, but also on the coast of England, Wales, and Ireland.

Mr. N. B. Kinnear exhibited, on behalf of Mr. F. Ludlow, a single egg of Biddulph's Ground-Chough (*Podoces biddulphi*) which the latter had taken at Ukalik, near Maralbashi, in

Chinese Turkestan, on March 22, 1930, from a nest in a desert poplar tree about 3 feet from the ground.

The nest, of which photographs were exhibited, was described as similar to that of a Magpie's, but without any dome.

According to Mr. Stuart Baker, one or two eggs of this bird are already known in Russia, but this example is the first which has been exhibited in this country.

A full description of the egg and nest will be published at a later date by Mr. Ludlow in 'The Ibis.' He has generously presented the egg to the British Museum.

The Rev. J. H. Hale showed a painting of a clutch of four erythristic eggs of the Lapwing (*Vanellus vanellus*) taken in 1915 in Banffshire, Scotland. The painting was the work of Miss Edna Bunyard.

The Hon. Guy Charteris exhibited a stuffed specimen of a Jackdaw with brown wings.

The Rev. F. C. R. Jourdain pointed out that the adding of initials to the name of the authority for the specific name, as recommended in the Chairman's address (*antea*, p. 39), was cumbrous and unnecessary, except in about half a dozen cases where more than one authority possessed the same surname, as in the cases of C. L. and A. E. Brehm or P. L. and W. L. Sclater.

Under the present rules the specific name, if an adjective, should agree in gender with the generic name, and this is the universal practice. Hartert for a time adopted the plan of retaining specific names as originally applied, irrespective of gender, but abandoned this method in vol. ii. of the 'Vög. Pal. Fauna.' There seems to be no reason for preferring feminine terminations in Ornithology as suggested on p. 38 of the 'Bulletin.'

NOTICES.

The next Meeting of the Club will be held on Wednesday, February 11, 1931, at PAGANI'S RESTAURANT, 42–48 Great Portland Street, W.1. The Dinner at 7 p.m.

Members intending to dine are requested to inform the Hon. Secretary, C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W.7.

Members are reminded that the subscription for the Session, £1 1s. 0d., is now due. The Treasurer hopes that those not paying by banker's order will now send him this without further notice.

Members who intend to make any communication at the next Meeting of the Club should give notice beforehand to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W.1, and give him their MSS. for publication in the 'Bulletin' not later than at the Meeting.

The attention of Members is drawn to the fact that the March Meeting, which will be held on Wednesday, March 11, 1931, in conjunction with the British Ornithologists' Union, will be devoted principally to the exhibition of lantern-slides. The Hon. Secretary will be glad to hear from any Member who has slides to exhibit, in order that the necessary arrangements may be made.

PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

LIBRARY

No. CCCXLVIII.

The three-hundred-and-forty-third Meeting of the Club was held at Pagani's Restaurant, 42–48 Great Portland Street, W.1, on Wednesday, February 11, 1931.

Chairman: Major S. S. Flower.

Members present:—Miss C. M. Acland; W. B. Alexander; W. Shore Baily; E. C. Stuart Baker; F. J. F. Barrington; Miss M. G. S. Best; George Brown; P. F. Bunyard; A. L. Butler; Sir Percy Z. Cox; R. H. Deane; J. Delacour; Lt.-Col. A. Delmé-Radcliffe; A. H. Evans; A. Ezra; Miss J. M. Ferrier; B. G. Harrison; Dr. J. M. Harrison; T. H. Harrisson; Mrs. T. E. Hodgkin; Miss D. Hordern; Rev. F. C. R. Jourdain; N. B. Kinnear; Miss E. P. Leach; B. Lloyd; Dr. G. Carmichael Low (*Editor*); Dr. N. S. Lucas; T. H. McKittrick, Jr.; C. W. Mackworth-Praed (*Hon. Sec. & Treas.*); Lt.-Col. H. A. F. Magrath; Dr. P. Manson-Bahr; G. M. Mathews; Mrs. D. Micholls; C. Oldham; F. R. Ratcliff; Lord Rothschild (*Vice-Chairman*); W. L. Sclater; D. Seth-Smith; Major M. H. Simonds; Marquess of Tavistock; Dr. A. Landsborough Thomson; Dr. C. B. Ticehurst; B. W. Tucker; Miss E. L. Turner; H. Whistler; H. F. Witherby; C. R. Wood; C. de Worms.

Guests:—Miss Joyce Baily; Capt. B. S. Cohen; N. B. Coltart; Lady Elizabeth Howard; Dr. Karl Jordan.

Mr. Gregory M. Mathews sent the following comments on Opinion No. 115 recently rendered by the International Commission on Zoological Nomenclature ('Smithsonian Miscellaneous Collections,' vol. lxxiii. no. 7. Opinions 115 to 123, pp. 1–36, January 10, 1931) :—

During the last quarter of a century many of us have been worried about generic names from the same derivative, but differing only in termination.

In the committee of the 'Systema Avium' we agreed, by a bare majority, that names of genera from the same derivative, differing only in the endings *-us*, *-a*, *-um*, *-as*, *-os*, *-is*, *-es*, *-e*, or *-on*, were to be considered identical, thus, I believe, agreeing with many workers the world over.

Now it generally happened that the genus under consideration was a bird genus, and the one supposed to pre-occupy it was in some other branch of Zoology, so we agreed that one could never mistake a bird for, say, a sponge. So the matter drifted, and, as the International Commission on Zoological Nomenclature say (on p. 2), this represents one of a series of cases which they have discussed for more than 25 years, but upon which they have never been able to reach a satisfactory agreement. The best they could do was to advise against the introduction of new generic names which differ from generic names already in use only in termination.

Unfortunately they gave us one example, *Picus* and *Pica*, of which B. B. Woodward says (p. 3) : "Occasion might be taken to point out that the frequently misquoted case of *Picus* and *Pica* does not apply here, since these names are two distinct Latin substantives, not modern makeups, and not merely variations in gender of one and the same word."

The Commission go on to say (p. 2) : "In this unsatisfactory status of the results, all the Commission can expect to do is to build up a series of Opinions on special cases in the hope that these Opinions can some day be formulated into a principle."

The case under discussion is *Leucochila*, 1861, and *Leucochilus*, 1881, and the Commission suppress the word ending in *-us* as being equivalent to the word ending in *-a*.

They do not say that all other cases are to be treated in the same way, although many people would so consider them.

They do say, however, on p. 3, No. 2: "For the purpose of this Opinion, and on practical grounds (in order to prevent confusion), the Commission herewith considers *Leucochilus*, 1881, a homonym of *Leucochila*, 1860, and therefore not entitled to stand."

The draft of this Opinion was forwarded to B. B. Woodward of London, asking for his views. He replied :—

"*Leucochilus* and *Leucochila* are absolute homonyms. They are merely the masculine and feminine forms of one and the same name. . . . In my opinion the Commission would be best advised, taking advantage of the present instance, to lay down the principle that: 'Names of genera differing only in their termination, when that is indicative solely of gender, cannot be employed for distinct genera, but must be considered to be homonyms.'"

As the Commission referred to Woodward in their dilemma, I thought, perhaps, that members of the British Ornithologists' Union and Club would like to hear the verdict.

My object in bringing this forward is to try to obtain *uniformity*. The argument that many changes would be necessary if this rule was made compulsory is not borne out by results. Of the 10,000 references in my 'Systema' volumes, only about one change in every 1000 references is due to this—considerably fewer than the changes due to the "Law of Priority," on which we are all agreed, and of which the Commission will admit *no* exception. They say that :—

"It may be admitted as possible that temporary confusion will result from its application [the Law of Priority . . .]; but such confusion will assuredly be less than would result from the recognition of the *first exception*. . . .

"The Commission is, therefore, clearly of the opinion . . . that it is wiser for the present generation to bear with the temporary inconvenience of a few changes than to transmit to future generations, our nomenclatural problems, augmented a hundredfold by the addition of the ever-increasing number of systematic units made possible by the like increase in the amount of literature."

This is excellent. Admit *no exception*, and the world knows where we stand.

Now in Opinion No. 115 we find the Commission floundering. They are anxious to get a " formula " to cover a special case, and B. B. Woodward builds a bridge over which they can walk to this desired end. If words of the same derivative ending in *-us*, *-a*, *-um*, etc., are ruled to be the same, we have uniformity *at once*, and must allow *no exception* as above. If they are ruled to be different, why make an *exception* and so stultify their own words of 1910, as the Commission are doing in Opinion No. 115 ?

It might be well here to quote again from B. B. Woodward *re* the procedure of the Commission. He says (p. 16 of above Opinions) :—" Your statement as to the method of procedure of the Commission is illuminating. It seems that unless the appellant, who is naturally biased, happens to have given a complete statement of facts, it is nobody's business to see that a full case is placed before the Commission, who may, therefore, be called upon *solemnly to adjudicate on imperfect evidence* " (the italics are mine.—G. M. M.). This is a very important statement, and may explain faulty judgments (if any are ever given).

[Perhaps this explains Opinion No. 103 on the generic name *Grus*. We find in Pallas's Miscell. Zool. 1766, p. 66, *Grus crepitans* seu *Psophia* Linnæi. Surely a substitute name.—Ed.]

Lord Rothschild said he had never had to deal with exactly such a case as Mr. Mathews outlined ; but he had just had to decide the case of *Coracina* versus *Graucalus*, in which Mr. Mathews himself rejected *Coracina* and used *Graucalus* because, he said, *Coracina* was preoccupied by *Coracinus*, used in another order of creatures at an earlier date. He had come to the conclusion that, as the Commission had decided that generic names ending in *-a* were different words from those ending in *-us*, so *Coracina* was not a homonym of *Coracinus*, and, being an older name than *Graucalus*, must be reinstated and used instead of it.

Dr. Karl Jordan said that the question raised by Mr. Mathews was dealt with in the Code of Nomenclature, where it was stated that generic names differing only in termination (such as *-us*, *-a*, *-um*, or *-os* and *-on*), when once

introduced, were not to be rejected on that account. The Commission recommended, however, that in future the introduction of such names should be avoided. As regards specific names, there was some contradiction in the Code, inasmuch as the Rules demanded that an adjectival specific name must conform to the gender of the generic name, whereas a substantival specific name kept its own gender. Many authors were of the opinion, expressed more than half a century ago by Staudinger, that all names should be treated as unalterable nouns. In view of the rapid decline of the teaching of classical languages at school, and the fact that a good many taxonomists did not seem to have acquired even a smattering of Latin, there was much to recommend that method. However, the Code was against it.

[This is so, *vide* p. 38 of the original rules of 1905, Article 36, Recommendation, but this is not Mr. Mathews's point. He complains that the International Commission on Zoological Nomenclature, after deciding upon the above ruling, have now gone against it, and abolished a word ending in *-us* because of one ending in *-a* (vide supra, *Leucochila* and *Leucochilus*). If an exception can be made to a rule in one instance, why should it not in others. To break a rule appears to be a dangerous expedient.—Ed.]

Lord Rothschild sent the following description of a new subspecies of *Trugon terrestris* Gray :—

Trugon terrestris mayri, subsp. nov.

This bird differs from *Trugon terrestris terrestris* in having the back and wing-coverts olive-brown, *not* olive greenish black, the abdomen being much whiter and the flanks paler rufous-cinnamon. From *T. t. leucopareia* it differs in the absence of the chestnut-chocolate colour of the back, rump, and wing-coverts. Type ♂, No. 2985 ; Dr. Ernst Mayr, Oct. 18, 1928, Hollandia ; 2 ?, Humboldt Bay, Dumas Coll.

The male and female of this new subspecies obtained by Dr. Mayr at Hollandia were listed by Dr. Hartert as *Trugon terrestris terrestris* ; but his notes on the label already expressed his doubts as to the correctness of his diagnosis.

Mr. J. Delacour sent the following note :—

Following Dr. Hartert's and M. Lavauden's remarks on Madagascar birds in the last ' Bulletin,' p. 56, I may state that about 50 *Thamnornis chloropetoides* were collected in 1929 by the Franco-Anglo-American Expedition under my leadership near Vondrozo, in the S.E. of the island of Madagascar. These specimens will soon be divided between the French, British, and American Museums.

Several hundreds of *Nesillas typica* have been, and still are, being secured by the expedition from many different localities, so that a revision, based on a large series of this difficult and variable species, will be possible in a short time.

Mr. David A. Bannerman sent the following note :—

He proposed to distinguish the Little Tern which is a resident breeding species in West Africa as

Sterna albifrons guineæ, subsp. nov.

Differs from the Little Tern which occurs on the East African coast, which is usually allied with *Sterna albifrons saundersi* * (type-loc., Karachi) in having an almost yellow bill, only the tip dusky and not heavily tipped with black. In the small series available the bills are heavier, and both bills and wings are relatively shorter. The rump is whiter, as in typical examples of *Sterna albifrons albifrons*, contrasting with the back instead of blending with it, as in East African specimens (? *S. a. saundersi*). West African examples have bills measuring 28–30 mm. (in East African skins they reach 33 mm.) ; wings 160·5–170 mm. (in East African skins the wing reaches 177 mm.).

From Palæarctic examples it differs in its smaller size and the colour of the bill.

* The name *Sterna albifrons novella* Hartlaub has been mentioned as possibly applicable to the West African bird, but the type of *novella* came from Kingani, in East Africa, and if it does not refer to a Palæarctic species of the Little Tern in winter dress, which Hartert appears to consider most probable (Vög. pal. Faun. p. 1714), then it can only be applicable to the East African race.

The West African race is known to nest on the sandbanks of the Niger and Benue Rivers and in Gabon. Hartert has remarked that eggs taken in Gabon by Ansorge are darker than in typical *S. a. albifrons*. Major Hutson took eggs on a sandbank in the Niger between Muregi and Shonga in May.

Type in the British Museum, ♀ adult; near Loko, Benue River, April 9, 1904, Boyd Alexander collection. Brit. Mus. Reg. no. 1911.12.23.285.

Habitat. Nigeria and Gabon (breeding), and probably elsewhere in West Africa. Sjöstedt found them in Cameroon, Reichenow and Weiss on the Gold Coast, and Boyd Alexander in the Ubangi-Shari Territory.

Dr. C. B. Ticehurst forwarded the following communications :—

(i.) In 1844 Blyth (Journ. Asiat. Soc. Bengal, xiii. 1844, p. 958) described from Hodgson's MS. a Bunting under the name of *Emberiza sordida*. In Blyth's 'Catalogue' and in Horsfield and Moore's 'Catalogue' this name appears as a synonym of *Emberiza pusilla*, and again in the 'Fauna of British India, Birds,' ed. 2, vii. p. 247. No one who has looked at Blyth's original description can doubt that *E. sordida* is *not* a Little Bunting. The single specimen from which the description was originally taken is still in the British Museum, and Mr. Kinnear kindly informs me that it is a female of *Emberiza spodocephala melanops*. As this latter was not described till 1845, the correct name must now be *Emberiza spodocephala sordida* Blyth.

(ii.) In the Bull. B. O. C. xlvii. 1926, p. 39, Mr. B. Stegmann has named a Tawny Owl from Trans-Caucasia (Lenkoran) *Strix aluco obscurata*. Professor Menzbier had already (Bull. B. O. C. vi. 1896, p. vi, and Ibis, 1897, p. 113), described a Trans-Caucasian Tawny Owl from Batum and Shushor as *Syrnium willkouskii*. The descriptions appear to be very similar, and as Mr. Stegmann does not compare his *obscurata* with this bird, one can only suppose he has overlooked Menzbier's description. If this race is separable it should surely stand under Menzbier's name.

Mr. W. Shore Baily showed some eggs, and said :—

I have brought a small collection of eggs from the Queen Charlotte Islands, off the coast of British Columbia, all from the collection of the Rev. C. J. Young, of Victoria, B.C. ; also a clutch of three Kites' eggs taken by the same gentleman in South Wales in 1883. Mr. Young thought these to be one of the last clutches taken in Great Britain, but I believe that some eggs have been taken in the last few years, since this bird has again been established in Wales. Amongst the Queen Charlotte Islands eggs are a clutch of four Peale's Falcon (*Falco peregrinus pealei*). I have compared these eggs with my Peregrines, and find that those of Peale's Falcon are considerably larger ; but, as *Falco p. pealei* is the largest of the Peregrines, this is to be expected. I am also showing the egg of a Sandpiper which Mr. Young believes to be that of the Wandering Tattler (*Tringa incana*). The islands and the adjacent mainland are summer homes of this bird, and the only eggs with which it could be confused are those of the two Yellowshanks. On comparing them with those of the Lesser Yellowshank (*Tringa flavipes*) I find that this egg is very much larger, while I think that it is a good deal smaller and less heavily marked than the eggs of the Greater Yellowshank (*Tringa melanoleuca*) recently exhibited at the Club by Mr. Bunyard. As compared with that of the Common Redshank, the egg is of the same size, and as the bird is also similar in size, I feel sure that I am right in labelling it, provisionally, *Tringa incana*. The measurements are 48×32 mm., but A. C. Bent gives the average of four eggs as $43{\cdot}9 \times 31{\cdot}9$ mm. Other eggs shown include those of the Rhinoceros Auklet (*Cerorhinca monocerata*). This bird is locally known as the Guillemot, and its eggs are like those of our Puffin, only larger. I also show two eggs of the Ancient Murrelet (*Synthliboramphus antiquus*), an egg closely resembling those of some of the Sand-Grouse, and one egg of the Marbled Murrelet (*Brachyramphus marmoratus*). This is a very common bird in Alaskan waters, but the egg is very rare in collections; it is rather smaller than that of the Ancient Murrelet, but similarly marked. Lastly, I exhibit one egg of

Cassin's Auklet (*Ptychoramphus aleuticus*). This bird appears to have a very wide breeding-range, as I have eggs from an island off Lower California.

The Rev. F. C. R. Jourdain stated that erythrism was rare in the eggs of the Alaudidæ. An exception was the case of *Rhamphocorys*, in which the eggs are bright pink, freckled with red; and the eggs of *Ammomanes*, as well as to some extent *Lullula*, show a strong tendency towards normal erythrism. In the Sky-Lark (*Alauda arvensis*) about half a dozen cases of erythrism have been recorded: one instance is known in which it has occurred in the Crested Lark (*Galerida cristata*), and a few cases might be classed under this head in the Calandra Lark (*Melanocorypha calandra*). In the Short-toed Larks (*Calandrella*) no instance has been previously recorded.

In the spring of 1921 Captain P. W. Munn took a remarkable set of four bright pinkish-red eggs of *Calandrella brachydactyla* in Mallorca. Unfortunately one of the eggs was broken, and, thinking that the set was spoilt, he did not forward it to me. Recently, however, I saw it, and obtained particulars of its origin. This is the clutch exhibited to-night. Another set, also erythristic, but not nearly so bright in colouring, was found by the speaker at Feriana, in western Tunisia, in 1925. Out of all the many hundreds of sets which must have been taken of this widely distributed species, these are the only two known examples of the erythristic variety.

Miss C. M. Acland read the following note on "Smew in Glamorgan":—

Following the records given at the last dinner of the Club, (Bull. B. O. C. li. 1931, pp. 59–60) by Dr. Carmichael Low and others, on the numbers of Smew (*Mergellus albellus*) on the London reservoirs and elsewhere, the following records of Smew in Glamorgan may be of interest.

Smew have appeared in that county on various occasions, but usually in twos and threes. On referring to the list of the

birds of Glamorgan published by the Cardiff Naturalist's Society, they appear to be of more frequent occurrence than formerly, and are now considered as " probably a regular winter visitor, in small numbers. An adult male and female were seen on one of the Cardiff reservoirs on December 5, 1926, by Mr. G. C. S. Ingram. "

On January 27, 1929, I saw eight on a large sheet of water, twenty-five miles from Cardiff—seven brown-headed birds and a very white one, chiefly about the back, but not yet in full adult male plumage.

This party was still on the same pool on February 24, 1929, and on another pool about four miles away, on March 10, 1929, there were four, one of these being " very white," as I noted at the time.

Mr. P. F. Bunyard read a short paper on the " Identification of the Eggs of the Limicolæ."

Dr. G. Carmichael Low sent the following communication :—

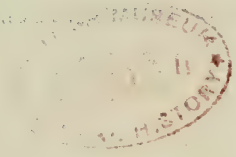
On Saturday morning, February 14, 1931, Mr. A. Holte Macpherson saw and identified a Great Skua (*Catharacta skua*) at Staines Reservoir, Middlesex. The bird was seen by members of the Club and other ornithologists next day, Sunday, February 15, and again during the ensuing week. On Sunday, February 22, 1931, the writer, together with Mr. A. Holte Macpherson, Mr. F. R. Finch, and Miss D. Hordern, had the interesting experience of watching it tear up the carcase of a Coot on the edge of the south reservoir only a hundred yards or so away. A fine view of it was also obtained later, sitting on the water and then hawking over the banks of the reservoir like a harrier. This is the first record of the Great Skua for Middlesex.

NOTICES.

The next Meeting of the Club will be held on Wednesday, March 11, 1931, at PAGANI'S RESTAURANT, 42–48 Great Portland Street, W.1. The Dinner at 7 p.m. Members are reminded that this Dinner is held conjointly with the Annual Dinner of the B. O. U., and that they are allowed to bring Lady Guests.

The Meeting will be devoted to the exhibition of films and lantern-slides.

Members of the B. O. C. intending to dine should inform the Hon. Secretary, C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W.7, and not the Secretary of the Union. This notice is necessary in order that the seating may be arranged beforehand, and failure to let the Secretary know may result in no seat being available.



Bird Room

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCXLIX.

The three-hundred-and-forty-fourth Meeting of the Club was held at Pagani's Restaurant, 42–48 Great Portland Street, W.1, on Wednesday, March 11, 1931, in conjunction with the Annual Dinner of the British Ornithologists' Union.

Mr. W. L. Sclater, the President of the B. O. U., took the Chair during the Dinner, and Major S. S. Flower, Chairman of the Club, during the subsequent proceedings.

Members of the B. O. C. present:—Miss C. M. Acland; W. Shore Baily; E. C. Stuart Baker; D. A. Bannerman; F. J. F. Barrington; Miss M. G. S. Best; S. Boorman; H. B. Booth; A. W. Boyd; G. Brown; P. F. Bunyard; Hon. G. L. Charteris; H. P. O. Cleave; Sir Percy Z. Cox; Lt.-Col. A. Delmé-Radcliffe; A. Ezra; Miss J. M. Ferrier; K. Fisher; Col. A. E. Hamerton; B. G. Harrison; T. H. Harrisson; Miss D. Hordern; Rev. F. C. R. Jourdain; Miss E. P. Leach; Dr. G. Carmichael Low (*Editor*); Dr. P. R. Lowe; Dr. N. S. Lucas; T. H. McKittrick, Jr.; C. W. Mackworth-Praed (*Hon. Sec. & Treas.*); W. E. F. Macmillan; J. H. McNeile; G. M. Mathews; Dr. W. N. May; E. G. B. Meade-Waldo; Mrs. D. Micholls; T. H. Newman; B. B. Osmaston; D. Seth-Smith; Sir M. C. C. Seton; Major M. H. Simonds; Major A. G. L. Sladen; Marquess of Tavistock; A. L. Thomson; W. H. Thorpe; B. W. Tucker; Miss E. L. Turner; H. Whistler; H. F. Witherby; C. R. Wood; C. de Worms.

Members of the B. O. U. :—Miss P. Barclay-Smith ; Miss R. G. Blezard ; R. O. Blyth ; F. Cowan ; K. J. Acton Davis ; F. H. Edmonson ; Miss E. M. Godman ; Mrs. A. Gordon ; Seton P. Gordon ; S. H. Hart ; Miss F. J. Howell ; J. S. Huxley ; Mrs. H. M. Rait Kerr ; Miss E. M. Knobel ; W. S. Millard ; Mrs. A. H. Murton ; Lt.-Col. W. A. Payn ; Major L. C. Sargent ; I. M. Thomson ; Miss T. Wake ; Capt. L. R. Waud.

Guests present :—Capt. J. D. Acland ; Mrs. Shore Baily ; D. E. Baker ; Mrs. Stuart Baker ; Mrs. D. A. Bannerman ; Miss L. Charteris ; Miss J. Clark ; Mrs. Stephenson Clarke ; Miss S. Clay ; Lady Cox ; Mrs. Acton Davis ; Miss E. J. Delmé-Radcliffe ; M. D. Delmé-Radcliffe ; Miss L. S. Flower ; Mrs. S. S. Flower ; Capt. H. A. Gilbert ; Mrs. H. A. Gilbert ; Lady Mary Grey ; Mrs. Hildyard ; Col. R. Jordan ; E. La Coste ; Miss C. Longfield ; Sir George Loundes ; Mrs. G. Carmichael Low ; Mrs. Percy R. Lowe ; Mrs. Lucas ; Miss B. S. Lynes ; S. Mackenzie ; Mrs. C. W. Mackworth-Praed ; Mrs. Macmillan ; H. Mercer ; C. P. Moore ; D. M. Palmer ; W. H. Perrett ; F. Pike ; Miss D. T. Raikes ; H. M. Salmon ; Mrs. W. L. Sclater ; Lady Seton ; J. A. Sillem ; Mrs. A. G. L. Sladen ; Miss Solly ; H. S. Stoner ; Mrs. A. L. Thomson ; Mrs. B. W. Tucker ; F. R. Waley ; Mrs. S. Walton ; Mrs. H. F. Witherby ; Miss Witherby ; and three others, making a total of 125, a number well up to the average.

The evening was devoted to an exhibition of films and lantern-slides.

Miss C. M. Acland showed some photographic slides of some of the rarer British birds and made remarks upon them :—

(1) One of Captain Knight's Ospreys (*Pandion haliætus haliætus*). One of four birds imported into Britain in the hope that they would stay and nest.

(2) A Kite (*Milvus milvus milvus*) and its nest from Mid-Wales.

(3) A group of Bewick's Swans (*Cygnus bewickii*) on a stretch of water in Glamorganshire. Since 1921 this bird has become a regular winter visitor to that county.

(4) Spoonbills (*Platalea leucorodia leucorodia*) in flight on the Naardermeer, Holland. This bird nested in Great Britain until the 17th century, in East Anglia, in some of the southern counties and in South Wales.

(5) An Avocet (*Recurvirostra avosetta*) at its nest in Texel, showing attitudes feigning injury. The Avocet used to nest in England up to 1842.

(6) A Stilt (*Himantopus himantopus himantopus*) and its nest, in the Camargue.

(7) A nest of the White Stork (*Ciconia ciconia ciconia*), the different attitudes adopted by the bird on its passage to and fro and on the nest being illustrated.

Mrs. Seton Gordon showed a film of Seals and Sea Birds in the Outer Hebrides :—

The Atlantic or Grey Seal (*Halichœrus grypus*) only comes to land to breed in October and November. Many exposures of the mother seal with its young were given, the scenery of the sea and the rocky islands being very fine.

Puffins (*Fratercula arctica grabœ*), Barnacle Geese (*Branta leucopsis*), and Guillemots (*Uria aalge aalge*) were also in the picture from time to time.

It is now known that the Guillemot of the Outer Hebrides is the Northern form, *Uria aalge aalge*, and not the Southern form, *Uria aalge albionis*.

Captain H. A. Gilbert demonstrated a film by Mr. Arthur Brook of the Golden Eagle (*Aquila chrysaëtos chrysaëtos*) at its nest. Starting with the two newly hatched young ones, he traced their development up to the time when, fully fledged, they left the nest and started on a career of their own. The destruction of game which Eagles carry out was well demonstrated, grouse and mountain hares constantly being brought to the nest to feed the young.

He also showed some photographs of White Herons (*Egretta alba alba*), Storks (*Ciconia ciconia ciconia*), and other birds from Hungary.

The Rev. F. C. R. Jourdain showed a series of slides illustrating the characteristic scenery of the Balearic Islands. Of these about 13 were taken in Mallorca, chiefly in the Alcudia district ; six illustrated the town of Ibiza and the Sta. Eulalia River in Ibiza, and there were four of the coast scenery and wind-swept trees of Formentera. These were taken in 1930. There were also three slides of the great colony of Spoonbills (*Platalea l. leucorodia*) at Zwanenwater in North Holland, which is probably the largest in Europe. It was thrown open to members of the International Ornithological Congress which took place in June 1930, and these photographs were taken on that occasion.

Mr. Jourdain also showed 17 slides of scenery in Cyprus, taken during his visit to that island in 1929. There was still much snow among the pines on Troödos at the end of April, though most of the crops had already been harvested on the scorching plains of the Mesaoria. Slides of both northern and southern ranges, as well as the Karpass Peninsula and the Klides Islands, were exhibited.

Dr. V. G. L. van Someren forwarded the description of a new subspecies of the Narina Trogon, *Apaloderma narina narina* :—

Apaloderma narina littoralis, subsp. nov.

Differs from *A. narina narina* and *A. narina brachyurum* in being considerably smaller, in both sexes. Comparative wing and tail measurements being as follows :—

A. n. narina : wing 129–144 ; tail 160–200 mm. (in my Coll.).
,, 128–145 ; ,, 160–200 mm. (Chapin).
A. n. littoralis : ,, 117–125 ; ,, 155–160 mm. (in my Coll.).

They differ further in the following manner : The fine vermiculations on the wing-coverts and inner secondaries are purer, the ground-colour being pure white. In the female, the facial brown and that of the breast-band are lighter clearer brown, not tinged with grey, and the grey of the lower breast is very much paler, pearly-grey with a slight pinkish admixture on the flanks ; the abdomen and flanks are a paler clearer pink, slightly darker on the under tail-coverts.

The females differ more markedly than do the males.

Type, ♂ adult, Sokoke Forest, 20/5/21 ; paratype, ♀, Hellesheid, Juba River, March 1923.

Distribution. The coastal forests of Kenya, from Vanga to the Juba River.

Comparative material. 20 skins of the coastal form, 18 of the nominate race.

Dr. C. B. Ticehurst forwarded the following communication :—

In the ' Fauna of British India ' (ed. ii. vol. vii. p. 408), Mr. Stuart Baker proposes the generic name *Limnaëtops* for the Hawk-Eagles which used to be placed in the genus *Spizaëtus* of Vieillot. Before this name gets further into bibliography, I must point out that it is quite an unnecessary and incorrect name for this group, as in 1836 (Journ. Asiat. Soc. Bengal, v. 1836, p. 228) Hodgson proposed the genus *Nisaëtus* for the reception of these Eagles with the type *N. nipalensis*.

Dr. G. Carmichael Low sent the following communication upon the occurrence of a Bewick's Swan (*Cygnus bewickii*) in outer London :—

On Friday evening, March 5, 1931, Mr. A. Holte Macpherson telephoned that he had heard of a Bewick's Swan being seen on one of the ponds in Wanstead Park, Essex, and also on a small pond on Wanstead Flats. A keeper had first detected the stranger and had communicated the information to Mr. H. A. Littlejohn of the London Natural History Society.

On Saturday morning, March 6, 1931, the writer, with Mr. Macpherson and Mr. F. R. Finch, went to Wanstead Flats and had the good fortune to see the bird on the small pond there. It appeared quite tame and came in quite close to the main road, upon which the pond abuts, to feed with the Mute Swans (*Cygnus olor*), Mallards (*Anas platyrhynchos*), and Tufted Duck (*Nyroca fuligula*), which were being given bread by a girl. At one time it was within five yards of the observers.

The bird was an adult in fine plumage and condition, and showed no appearance of having been wounded. Apparently it had been blown inland by the easterly gales which swept the country during the week.

Mr. J. Delacour sent the following correction :—

He said that through a slip of the pen he had stated in the last number of the 'Bulletin' (Bull. B. O. C. li, 1931, p. 70) that about 50 *Thamnornis chloropetoides* were collected in 1929 near Vondrozo, in the S.E. of the island of Madagascar.

This should have read "in the Province of Tulear, in the S.W. of Madagascar." Most of the specimens were collected at Tabuky west of Ankazoabo and at Ampotoka.

NOTICES.

The next Meeting of the Club will be held on Wednesday, April 8, 1931, at PAGANI'S RESTAURANT, 42–48 Great Portland Street, W.1. The Dinner at 7 p.m.

A lecture will be given by Dr. P. Manson-Bahr on "The Breeding Displays of certain Waders with special reference to the Snipe Family."

Members intending to dine are requested to inform the Hon. Secretary, C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7.

Members who intend to make any communication at the next Meeting of the Club should give notice beforehand to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1, and give him their MSS. for publication in the 'Bulletin' not later than at the Meeting.

Bird Room

MAY 1931
PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCL.

LIBRARY

The three-hundred-and-forty-fifth Meeting of the Club was held at Pagani's Restaurant, 42–48 Great Portland Street, W.1, on Wednesday, April 8, 1931.

Chairman : Major S. S. Flower.

Members present :—Miss C. M. Acland ; E. C. Stuart Baker ; F. J. F. Barrington ; A. L. Butler ; H. P. O. Cleave ; Sir Percy Z. Cox ; Lt.-Col. A. Delmé-Radcliffe ; A. H. Evans ; Miss J. M. Ferrier ; Dr. J. M. Harrison ; R. E. Heath ; Dr. E. Hopkinson ; Miss D. Hordern ; Dr. Karl Jordan ; N. B. Kinnear ; Miss E. P. Leach ; B. Lloyd ; Dr. G. Carmichael Low (*Editor*) ; Dr. N. S. Lucas ; T. H. McKittrick, Jr. ; C. W. Mackworth-Praed (*Hon. Sec. & Treas.*) ; Dr. P. Manson-Bahr ; G. M. Mathews ; T. H. Newman ; C. Oldham ; Lord Rothschild (*Vice-Chairman*) ; D. Seth-Smith ; Dr. A. Landsborough Thomson ; H. F. Witherby ; C. de Worms.

Guests present :—Prof. J. Berlioz ; Miss E. J. Delmé-Radcliffe ; D. H. Manson-Bahr ; P. E. C. Manson-Bahr ; D. van Bruyn ; E. E. Wishart ; Dr. S. Zuckerman.

Dr. P. H. Manson-Bahr read a paper, illustrated by lantern slides :—

On the Breeding Displays of certain Waders, with special reference to the Snipe Family.

The curious performances of different members of the Charadriiformes during the breeding-season have always held a special interest for me, and, although a good many observations have been made by field-naturalists on this point, yet I am convinced that much more remains to be done to probe into the inner meaning of these things. Many years ago I resolved to pay special attention to this group, with the idea of correlating such specialized displays as the "drumming" of certain members of the Snipe family with that of other Waders; but, alas! during the last twenty years I have had neither the leisure nor the opportunity to carry out the good resolutions I formed so long ago.

In showing the slides which illustrate this paper, and in recounting to you these notes, I feel that I am unable to regale the learned members of the B. O. C. with any new or outstanding facts. Much of it, indeed, is ancient history; but I feel that if I can but arouse some fresh interest in any suggestions as regards *motif* which I put forward, or in the obvious *lacunæ* in our knowledge, I may divert your attention, for a short time at any rate, from eggs and skins, and escape the opprobrium of being labelled an imposter. During recent years Eliot Howard has directed attention in a particularly original manner to the nuptial displays of many of our smaller and more familiar birds, such as Warblers *; but none are so fascinating, so striking, or so highly specialized as the members of the group we are considering to-night. These displays are connected, of course, with the marriage act. In some the performance of an aerial evolution or contortion is confined to the male sex only, and is enacted as a preliminary to copulation; in others, again, both sexes seem to take part, and the displays are continued during incubation and till the young are hatched. In the Snipe family there appears to be definite evidence that this is so, at least in those who go through the aerial dance termed "drumming."

* 'An Introduction to Bird Behaviour,' Cambridge University Press, 1929.

Here we are led to enquire what purpose this marriage dance fulfils and why it should be commenced sometimes before mating has occurred; why also it should be continued until the breeding-season is over and why should some closely-related members of the family possess the power of drumming and others not at all; and how comes it that the closely-related Woodcock family should possess such extremely different habits? According to Eliot Howard, "sexual flight is sexual function as far as lies in the birds." For the purpose of this paper it is not convenient to arrange the various species on a strictly taxonomic basis.

I will commence with certain selected Charadriidæ, and then proceed to the Scolopacidæ.

(1) Charadrius hiaticula hiaticula. Ringed Plover.

That the familiar Ringed Plover has a definite marriage flight is known to all. We are all familiar with its low, yet far-sounding whistling note, which is prolonged into a primitive warble as, with antics like some low-flying crazy aviator, it flits this way and that in ever widening circles round its nesting-site. I think it is probable that both sexes take part in this flight, though in the male the display is more accentuated than in the female. The performance is entirely vocal, and no sound appears to be produced by the wings.

(2) Charadrius melodus. The Piping Plover.

This bird, which breeds in North America from New Jersey to Novia Scotia, has a similar display to the species already referred to. I have studied it on Gardiner's Island, in Long Island Sound. It performs a winged dance round the nesting-site, uttering mournful monotonous notes, which have been rendered "*Queep, queep, queep-o*," reminding one of an Italian hand-organ or hautboy.

(3) Charadrius vociferus. The Killdeer Plover.

This beautiful Plover corresponds in North America to our Peewit or Lapwing, so familiar is it, and so closely associated with man. It is probably the most vociferous of its tribe, and is well named Killdeer; while, on account of its dashing

habits and its particularly penetrating note, it is probably the most conspicuous member of the Plover tribe during the breeding-season. F. M. Chapman, in his 'Handbook of Birds of Eastern North America,' 1912, p. 265, describes it as flying swiftly, pursuing a most irregular course, soaring and dashing downwards, uttering its half-petulant, half-plaintive note, "*Killdee, killdee, killdee.*"

(4) Pluvialus apricarius. The Golden Plover.

This bird has a breeding display in which it indulges directly on its return to the moors in late March or early in April. This is not a dashing side-to-side motion, but a soaring in wide circles at high altitudes, with widespread motionless wings. Apparently the male bird only takes part, and he performs directly over where the nest is to be situated, or where the female is actually incubating her eggs. The flight takes place usually towards evening or in the early morning just before rain. Whilst soaring, the bird dilates its throat and utters a long-drawn odd musical whistle which has been rendered "*Taludl-taludl-taludl,*" and which carries to a considerable distance.

(5) Vanellus vanellus. The Lapwing.

Almost everyone, ornithologist or otherwise, is familiar with the courtship display of the Peewit. I think it is pretty certain that in this species the male only takes part in the performance, and that the quite peculiar vibrating sound, which can be heard at a considerable distance, is produced by the resistance to the air of the specialized primary feathers. It is difficult to reproduce the sound experimentally with individual feathers, but I am convinced that it is caused by the mass of feathers which comprise the upper portion of the wing. I think it is generally recognized now that the wing of the male Lapwing can be differentiated from that of the female during the breeding-season, even during flight. I have recognized for many years that the wing of the male bird constitutes a musical instrument, and I made drawings of the bird early in 1904 to illustrate this specialization of the wing during the marriage flight. Later in the same year F. W. Frohawk demonstrated that the wing of the male

has a bolder and more rounded outline, giving a decidedly curved outline, whilst the secondaries, being considerably shorter, add greatly to the rounded appearance (F. W. Frohawk, Ibis, 1904, pp. 446–51). According to Newton (Dict. Birds, 1896, p. 505), the word *Vanellus* is said to be derived from *Vannus*, a winnowing fan, and refers to the audible beatings of the bird's wings.

(6) Hæmatopus ostralegus. The Oyster-catcher.

There are few more noisy or demonstrative creatures at their nesting-sites than the Oyster-catcher, so that any peculiar aerial acrobatics that it indulges in are apt to be overlooked. But both sexes may occasionally be seen indulging in a soaring and dipping marriage flight, with outstretched wings and quivering primaries, over the nesting-site. During their descent to the ground they utter their shrill "*Keep-keep-keep.*" There appears to be no attempt to produce any musical sound with their wings.

(7) Phalaropus lobatus. The Red-necked Phalarope.

Whilst the female is the larger, bolder, and more brightly-plumaged bird, and is said to do all the courting, yet the male goes through evolutions representing his version of the marriage flight. I have seen more than one male chasing the female at the same time when just recently arrived on the breeding-grounds. The female may be floating on the water when two males circle round her head in a peculiar up-and-down dance. Alighting on the water, these suitors chase her for a while and soon dash away again over the marsh, uttering a low, warbling note not unlike that of the Piping Plover, but should any other female alight in the vicinity, the original selected one, being seized with envy, jealousy, and uncharitableness, becomes aroused and chases her away from the territory already claimed by her own peculiar males.

(8) Calidris alpina. The Dunlin.

This modest little Wader has an equally modest display of its own. It is not often seen, and is only performed, so far as my observations go, at the commencement of the

breeding-season, shortly after its arrival on its breeding-grounds. Apparently both sexes take part in a soaring flight during which they may rise to a very considerable height, 100–200 ft., circling round and round, with quivering wings and vibrating primaries, uttering their trilling tin-tin-whistle incantation, "*Deedle-deedle-deedle.*" Newton ('Ootheca Wolleyana,' ii. 1905, p. 226) remarks that very few ornithologists have attempted to do justice to the song-note of the Dunlin, though many have heard its loud ringing; sound, something between that of a small bell and of a metal pipe, continuous and musical, but very high in tone. A. C. Chapman (Ibis, 1894, p. 343) describes it as a "reeling" cry—hence the Danish name "*Reuill.*"

(9) Philomachus pugnax. The Ruff.

The Ruff, unlike other Waders so far considered, is almost entirely noiseless during its remarkable breeding-display, but is hardly less attractive on this account. All its vagaries are performed on *terra firma*, and no thought of such hazardous performance as a marriage flight enters its horizon. Immediately on arrival, each of the males (of which there always appear to be a greater number than the females) fixes upon a dry or grassy spot in the marsh, and about this he runs round and round until it is trodden bare. To this (as is picturesquely recorded by Bewick in his first edition of 'British Birds') it appears that he wishes to invite the female, and waits in expectation of her taking joint possession and becoming an inmate. As soon as a single female arrives and is heard or observed by the males, her feeble cry seems as if it roused them all to war, for they instantly begin to fight, and their combats are described as being both desperate and of long continuance. At the end of the battle she becomes the prize of the victor. As the Ruffs' display is therefore wholly carried out on the ground, their remarkable adornments are decorative and defensive, and there is no adaptation in their structure for any aerial performance. Wolley ('Ootheca Wolleyana,' ii. 1905, p. 188) remarks that nothing can be more expressive of humility and ardent love than some of the actions of the Ruff. He throws himself prostrate on the

ground, with every feather on his body standing up and quivering, but he seems as if he were afraid of coming too near his mistress.

(10) Tringa hypoleucos. The Common Sandpiper.

The Common Sandpiper has a nuptial display in miniature like that of the Redshank. The male only, I believe, takes part in this, soaring some 20–30 ft., with tremulous flittings of the wings, and uttering its musical, trilling, and piping note. In common with other Sandpipers, its habit of perching on fences and trees is to be noted.

(11) Tringa macularia. The Spotted Sandpiper.

It is impossible for the "Tip-up" to stand or walk quietly. It keeps "teetering" and flitting its tail continually, especially in the neighbourhood of its nest. The flight of the Spotted Sandpiper during the breeding-season is quite unlike that of other members of the family, being performed by well-measured wing-beats with wings drooping below the horizontal line and both wings stroking in unison, like the oars of a boat (Chapman). Its call—"*Peet-peet*"—which it commonly utters when startled, is similar in quality to the love-song, but the latter is prolonged into a shrill piping crescendo. The male bird hovers over the nesting-site or sitting female with outstretched quivering wings during this performance.

(12) Tringa totanus. The Redshank.

The large numbers of the genus *Tringa* have more pronounced displays, and approximate to a certain degree the remarkable gyrations of the Snipe. Though the Redshank does not produce any sound with its wings, it apparently attempts to do so by vibrating the tips until they become a mere blur. Both sexes appear to take part in the aerial display, and copulation is often attempted in the air. The male soars aloft to a very considerable height, with rigid body and head erect, and utters loudly his flute-like note, whilst his mate answers him from a lower level, or frequently poised upon a tree-branch or the top of a fence. Then, quivering with ecstasy, he drops gently downwards, hovering over her head, and

finally settling with extended wings, thus displaying the beautiful partially white primaries. It appears that the American representatives, the Yellow-legs—especially the lesser, *Tringa flavipes*—have an almost identical display (A. D. Henderson, ' Oologists' Record,' 1927, p. 15).

(13) Tringa nebularia. The Greenshank.

I have only once observed the Greenshank in its breeding-haunts and undergoing its nuptial display. This appears to me to be an exaggerated edition of that of the Redshank, with an even more vociferous accompaniment.

(14) Limosa limosa. The Black-tailed Godwit.

The male Godwit is an artist in crazy flying. I observed this bird first in North Germany in 1907 and again in 1930 at the same spot. The much smaller male gyrates and hurtles in the sky over his much larger and paler spouse. The marriage flight is usually performed at a considerable height. The bird hovers on quivering wings, with outstretched tail, as if attempting to elicit some musical note from them. The far-resounding note uttered at this time is " *Doo-it-too-doo-it-too.*"

The Snipe Family.

And now we come to the chief exponents of aerial symphony —" Symphobatics," one may dub them — the strange, bleating, humming, drumming, or whirring of the Common Snipe.

(15) Capella gallinago gallinago has for centuries held the attention of field-naturalists, and has given rise to its local nicknames of " Heather bleater " in Scotland, " Himmelsgeiss " in Germany, and " Chèvre volant " in France, whilst in Lapland, according to Wolley, it is known as the " Ram of the Heavens."

Now it appears that W. Meves, of Stockholm, was the first to draw attention to the tail-feathers, 14 in number, as the agents which produce this peculiar and penetrating sound. He remarked, with surprise, that the humming sound was never produced whilst the bird was flying *upwards*, but only when

casting itself downwards, with tail spread out. He was led to experiment with the tail-feathers through a misprint. In 1846 Ziegler, when writing about Neumann's wing-theory in his 'Federwildjagd,' made a *lapsus calami*, and wrote "schwanz-federspitzen" for "schwingfederspitzen." Altum (Ornith. Centralblatt, 1880, p. 149) performed experiments with a bird stuffed in the position of drumming, and by means of a blowpipe a strong current of air was directed under the wings into the tail-feathers, and the bleat was produced by them, apparently controlled by the vibrations of the wings. The peculiar separation of the specialized primary outer retrix from the rest of the tail was first noted by W. Evans of Edinburgh ("The Drumming of Snipe," 'Zoologist,' 1889, p. 315). He says: "The fan-like expansion of the tail has often been pointed out, but I cannot find anyone who has noticed the existence of a clear space between the outermost feathers and those next them. It is, of course, possible, but I think improbable, that the bird I saw had lost the second feathers on each side of the tail." In 1904, F. W. Headley ('Nature,' lxx. 1904, p. 103) noted that the outermost tail-feather on each side pointed outwards at a greater angle than those adjoining it, and considered that the drumming sound was due to the rush of air against this isolated feather. He noted, too, the scimitar-shape of this feather with much reduced outer web. When swung rapidly through the air, the drumming noise might be distinctly heard. The fact that both sexes drum appears to have been first proved by Boyes ('Field,' July 1898), who flushed a female Snipe off her nest, and as she left she dropped her fourth egg, which broke in its fall, and soon joined her mate "drumming" overhead, and the two were seen drumming together for some time. In 1904 I confirmed these observations in Cambridge, not only on the specialization of the musical feathers, but on the microscopical structure of the special feather. The radii of the rami of the inner web of these rectrices were shown to be provided with extra strong *hamuli* (or hooklets), which bound the radii together and rendered them tense, like the strings of a bow. This specialization, together with a special slip of the ilio-coccygeus muscle, was confined to the outer

retrix. A comparison was made at that time with the specialized feathers of other species of the genus (P. H. Bahr, Proc. Zool. Soc. Lond. 1907, pp. 12–35). It was confirmed, too, that both sexes took part in the drumming performance.

Once having convinced myself that the two outer tail-feathers are invariably spread out beyond the others during the act of drumming, it seemed to me that these two tail-feathers must be the active agents causing the bleat. I accordingly procured several outer tail-feathers and pierced the shaft with a pin to which I firmly bound it with cotton, and inserted the feathers into a cork at the end of a stick some six inches in length. A hole was then bored at the other end of the stick and a long string attached. This was then whirled round the observer's head and a typical bleating sound was produced. The adjacent outer tail-feathers, the sixth pair, produce a fainter sound: the others make no sound at all. In order to ensure that the experiment is a success, it is necessary: (1) that the feathers be so inserted in the corks that the narrow outer web shall encounter the resistance of the air; (2) that the string be tied to the distal end of the stick so that a vibratory motion is imparted to it as a whole, thus stimulating the tremulous motion of the Snipe's wings during the descent; and (3) that the apparatus be moved at a uniform rate and not too rapidly. To ascertain what particular part of the musical feather is essential to the production of the sound, I have cut away the barbs of the narrow outer web without altering the character of the bleat in any way; but, if the barbs of the inner web be so disarranged that there is a definite break, or gap, in their continuity, the web as a whole instantly ceases to vibrate, and no sound is produced. The vibration of the inner web can be observed if the feathers are affixed to a cork and moved rapidly through the air when riding a bicycle or by protruding them from a train window. When a speed of twenty miles an hour has been reached, the vibration commences, and, of course, becomes intensified as a higher rate is attained. If the feathers be damp, the volume of sound produced is greater, thus explaining how it is that Snipe are found able to bleat better and louder in rainy weather.

Since the two outer rectrices are extended beyond the other twelve during the descent, there must exist some separate mechanism by which this is brought into play. On examining the tail of a freshly-killed bird it is quite easy, by spreading out the tail, to make it assume the attitude of the bleat. There appears to be a special slip of the ilio-coccygeus muscle which is inserted into the base of the shaft of the outer two tail-feathers, and is capable of extending them beyond the rest; but a similar, though not so highly developed, slip of muscle is found in the tails of other Plovers and Waders who have not got any special powers of hyperextension of these particular two tail-feathers.

The rami of the inner web of the feather are firmly bound to one another and act as a musical instrument, very much like the strings of a harp. These rami are provided in turn with two well-developed rows of radii, the dorsal and proximal rows, of which the former are twice the length of the latter, The distal row of radii are well provided with hamuli and cilia. The former deserve special attention, since I believe them to be the essential factors in producing the bleat, in that they hold the stiff rami together. They are seven or eight in number, well in excess of that of any other species of *Capella* which I have examined. These hamuli are stout, well-formed, and possess a well-hooked terminal portion which interlocks with the upturned edge of the radii of the proximal row. The stiff rami of the outer web are provided with hooklets.

Before leaving this species I would like to refer to the remarkable experiences of H. Wormald ('British Birds,' ii. 1909, pp. 249–58) on the rearing of a tame Snipe in 1908, of which I exhibit several illustrations. The egg was hatched in an incubator in May 1908, after 20 days' incubation at 102° F. It was noted that for the first two days when food was offered the young Snipe ran backwards. Feathering commenced within one week of hatching, and directly it became feathered and the tail properly grown it was able to move the two outer tail-feathers at will beyond the rest of the rectrices; the outer tail-feathers nearest the fire only being extended beyond the rest. It will be noted that "John" differed from a wild-bred Snipe in his smaller size and shorter beak.

I once saw (20 years ago) a Sabine's Snipe bleating on Wicken Fen.

Other historical references to drumming or bleating of the Snipe are as follows :—

Vocal Theory.

Dobel. 'Jäger Practica,' 1783, pt. i. p. 73.

Bechstein. Naturgesch. Deutsch. ed. 2, iv. 1789, p. 190.

Pralle, W. A. E. 'Naumannia,' ii. 1852, pp. 24–26. Disposes of the vocal theory, as he has heard the Snipe uttering its note, "*Gick-jack, gick-jack,*" while bleating.

Hintz. 'Naumannia,' iv. 1854, p. 290.

Zoppritz. Ornith. Centralblatt, v. 1880, p. 172.

Seebohm, H. Hist. of British Birds, iii. 1885, p. 244.

Tail-feather Theory.

Ziegler, Louis. 'Federwild-Jagd,' 1846, p. 174. Hanover.

Jäckel, P. 'Naumannia,' v. 1855, pp. 112–113. Ridicules the suggestion of Ziegler conveyed by the "*misprint.*"

Meves, W. "On the Snipe's 'Neighing' or Humming Noise, and on its Tail-feathers' systematic value." Translated and communicated by John Wolley. P.Z.S. April 13, 1858, pp. 199–202, from Öfvers. k. Vet.-Akad. Förh. 1856, pp. 275–277.

Hancock, John. 'Birds of Northumberland and Durham,' vi.pp. 105–113. Severely criticises Meves's experiments.

(16) Capella gallinago delicata, Wilson's Snipe, of N. America, differs materially from *C. g. gallinago* in possessing 16 instead of 14 tail-feathers. Of these the outer two are specialized, but differ from the corresponding feathers of the latter species in that the inner web of these feathers, instead of being broader, is narrower than those of the remaining twelve tail-feathers. They are, in fact, somewhat attenuated, and this process of attenuation reaches its highest degree of development in *Capella stenura*. Both outer tail-feathers will produce a bleat on experiment, but the sound is of a far higher pitch than those of *C. g. gallinago*, and has been aptly described by American observers as "winnowing."

Audubon, in 'Birds of America,' v. 1842, p. 344, says the "sounds produced are extremely pleasing, though they fall faintly on the ear. I know not how to describe them, but I am well assured that they are not produced simply by the beatings of the wings. . . . !"

William Brewster, in Chapman's 'Handbook of Birds of Eastern North America,' 1912, pp. 246–247 writes: "In the spring-time, and occasionally in autumn also, Wilson's Snipe mounts to a considerable height above his favourite meadows, and darts downward with great velocity, making at each descent a low, yet penetrating, tremulous sound which suggests the winnowing of a domestic Pigeon's wings, and, if heard at a distance, the bleating of a goat, and which is thought to be produced by the rushing of air through the wings of the Snipe. This performance may sometimes be witnessed in broad daylight, when the weather is stormy, but ordinarily it is reserved for the morning or evening twilight, or for moonlight nights, when it is often kept up for hours in succession." E. A. Kitchen ('The Murrelet,' ii. 1921, no. 3, p. 11), says "the sound is undoubtedly produced by the tail. The noise is made when the bird suddenly dips in his flight; at that time the tail is held downwards at right angles with the direction of flight. The tail-feathers are spread out fan-like, and the sound is undoubtedly created by the wind passing through the stiffened feathers."

Time does not permit me to describe the nuptial flights of other species of *Capella* in great detail. These have 16–18 tail-feathers, with the specialization of the outer two or three pairs, and they all go through aerial evolutions similar to that of *C. g. gallinago*. The sound produced is deeper, more flute-like, and perhaps more penetrating. Such are:—

(17) Capella braziliensis braziliensis, which is believed to be the neo-tropical form of *C. g. delicata*, *C. nobilis* from Ecuador and Bolivia, and *C. hardwickii hardwickii* (Latham's or the Australian Snipe), which breeds on Mount Fujiyama, Japan. *C. solitaria*, from the Tian Shan Mountains, has 20 tail-feathers, of which the outer six are attenuated. *C. megala*, from S.E. Siberia, has also 20 tail-feathers, with a similar number of specialized feathers. The bleating produced by this large number of musical feathers was said by Przewalski to resemble that of a "racquet when the handle has been broken" (Taczanowski, Faun. Ornith. de la Sibérie Orientale, 1893, p. 958).

(18) Capella nigripennis, known by the Boers as "*Spook Vogel*," is an inhabitant of Central Africa. Its drumming

sound somewhat resembles that of *C. g. gallinago*. Of the 14 tail-feathers, the outer four are attenuated, and on experiment they produce quite an appreciable sound. According to Horsburgh (' Game-Birds of S. Africa,' p. 34) the performance is similar to that of *C. g. gallinago*.

And now we come to the mystery Snipe :—

(19) Capella stenura, the Pin-tailed Snipe of India, breeds in East Siberia, and possesses by far the greater number of tail-feathers of the genus, 26–28, out of which the outer eight are attenuated. The rami of these feathers are short and stout, *but, on experiment, no sound can be produced*, and yet there is incontestable evidence that in a state of nature a bleating sound *is produced* by the tail. According to Popham, who observed the bird on the Yenisei, the " Meckern " is longer than that of *C. g. gallinago*, and like the noise of Minnehaha, that of rushing waters. Mr. S. A. Buturlin, who found this species breeding on the Kolyma, thought that the sound produced in its aerial descents was purely vocal. Many more detailed observations are required on this species.

(20) Capella media. The Great or Double Snipe.

This species, although so Snipe-like in appearance, has no aerial nuptial flight, and its performance differs radically from other members of the genus. There are 16 tail-feathers, of which the outer four are white. The rami are not stiff, nor specialized in any way, and they certainly do not produce any sound on experiment. There is Prof. Collett's (of Christiana) well-known account of its *leg* or *spil* in Dresser's ' Birds of Europe, vol. vii. p. 635. Gadamer, in 1858, described a special " *Balzplatz* " where 50–60 birds congregated, and where the males collected to battle for possession of the females. Whilst producing its warbling notes the bird is in ecstacy, raising and spreading its tail like a fan. The display is mostly nocturnal. The notes produced during the pantomime are rendered " *Bip, bip, bipbip, bibiperere, bipere* ! "

(21) Lymnocryptes minimus. The Jack-Snipe.

The Jack-Snipe has 12 tail-feathers, all Woodcock-like, and none specialized. On examination and experiment

none produce a musical note whatever. It is very doubtful now whether Wolley's famous description of this bird on June 17, 1853, is correct (Newton, 'Ootheca Wolleyana,' vol. ii. pp. 252–53), who compared it to the "cantering of a horse in the distance on a hard hollow ground; it comes in fours, with a similar cadence and a like clear, yet hollow sound." Russow (Hartert, 'Vögel Paläark. Fauna,' 1912–21, ii. p. 1671) believes that the noise is made with the beak, like the "*Knebbern*" of *C. media*. He says (*loc. cit.*): "It circles in the air, and whilst flying makes a sound like a wagon-wheel out of which a piece of tyre is missing [Esthonian local name for this bird signifies 'a broken wheel']. The female, *per contra*, is said to make a clicking noise like that of the death-watch beetle." The latest observer is Chislett ('British Birds,' xxi, 1927, pp. 2–3), who thinks that Wolley's description is only partially correct. It is a short muffled sound, curiously distant, yet near, at one moment almost clear, then suddenly confused. Sometimes the bird could be seen patrolling high above, while at other times no bird was visible, and the sound seemed to emanate from the ground.

(22) Cœnocorypha aucklandica aucklandica. Auckland Island Snipe.

I would merely mention this in passing, not because I can find anything about its breeding-habits which have any bearing on the present subject. It is a slinking, skulking, Rail-like creature, quite unlike the bold, intrepid *Capellæ* we have been considering. But it has 18 tail-feathers, of which the outer three are attenuated. I do not suppose they are ever used by this species as a musical instrument in nature, but rather they are to be regarded as a relic of some former state. Contrary to what we would expect, they produce, on experiment, a distinct and pleasing sound of a high-pitched character.

(23) Scolopax rusticola. The Common Woodcock.

The Common Woodcock, with its peculiarly noiseless, owl-like flight, harbouring no specialized musical instruments in its plumage, must puzzle one with its high-pitched croaking

"*Atch*," which it gives vent to during the "roading" season. Yarrell says: "It sallies forth by night, whirling and whistling, in a manner very different from its usual owl-like flight by day, pursuing a well-known track. These tracks in open glades or woods are sometimes called 'cockshoots' and 'cock roads.'" Naumann tells us that on most occasions the males are much more in evidence than the females. The former tilt at each other with their beaks; but both sexes perform—each act lasting about a quarter of an hour. There is no differentiation in the tail-feathers in this species, nor do they produce any sound on experiment.

(24) Philohela minor. The American Woodcock.

The American Woodcock has a most distinctive marriage flight, but there is no evidence that the tail plays any part in producing this most distinctive music. On the other hand, this bird has the unique distinction, amongst the diverse company I have described, of producing an almost equally piercing, pleasing, and penetrating sound by means of the three attenuated outer primaries of the wing. I witnessed the performance once at dusk in New Jersey on March 18, 1911. The performance is so well and so classically described by F. M. Chapman in his 'Handbook of Birds of Eastern North America,' 1912, p. 245, that I cannot do better than quote it *in extenso*:—"The cloak of night always lends a certain mystery to the doings of nocturnal birds, and, more often than not, their habits justify our unusual interest in them. How many evenings have I tempted the malarial germs of Jersey lowlands to watch the Woodcock perform his strange shy dance. He begins on the ground with a formal, periodic '*Peent peent*,' an incongruous preparation for the wild rush that follows. It is repeated several times before he springs from the ground, and, on whistling wings, sweeps out the first loops of a spiral which may take him 300 feet from the ground. Faster and faster he goes, louder and louder his wing-song; then, after a moment's pause, with darting, headlong flight, he pitches in zigzags to the earth, uttering as he falls a clear twittering whistle!"

And now I have detailed, as far as lies in my power, the most recent information on this subject. You will no doubt

find much that has yet to be discovered, or explanations for which are not forthcoming. At any rate I apologize for my many imperfections.

In conclusion, I would like to thank Dr. G. Carmichael Low for his generous help in assisting me with the historical portions of the literature for the compilation of this paper.

Mr. A. L. Butler exhibited a stuffed Woodcock, *Scolopax rusticola*, in full nuptial display, mounted in accordance with the descriptions of those who have been fortunate enough to see this performance.

Lord Rothschild exhibited a pair of American Wigeon (*Anas* (*Mareca*) *americana*). He said that he exhibited them on behalf of Mr. G. C. Hitchcock who had killed them this year on Loch Maddy, in North Uist. Their great interest lay in the two facts, (1) that so few genuine records with unimpeachable data could be found among the so-called "British" examples of the American Wigeon, and (2) the greater proportion of the genuine records have been obtained off the West Coast of Ireland, while this pair were procured in the Outer Hebrides. This would point to the original home of the pair exhibited having been Greenland or Northern Canada, while the rest probably came over from Southern Canada or the United States.

Mr. D. Seth-Smith showed some very excellent photographs of the Australian Bustard, *Choriotis australis australis*, and of the Great Bustard, *Otis tarda tarda*, in full breeding display.

Dr. P. H. Manson-Bahr exhibited, on behalf of Lady Manson, a female Senegal Yellow-fronted Canary, *Serinus mozambicus caniceps*, which had lived in captivity for some 20 years. The bird flew into Chappell's music shop in Bond Street from a florist's shop next door in 1913, and had been kept by Lady Manson from that date, in the same cage, until February 24, 1931, when it died, *e. g.*, 18 years. If one allows that the bird was one year old at date of capture, this would make its life-total one at least of 19 to 20 years, a remarkable example of longevity in a small bird.

Dr. P. H. Manson-Bahr also exhibited a new apparatus for showing stereoscopic photographs of birds to the best advantage.

Lord Rothschild exhibited and described a new subspecies of Lark :—

Æthocorys personata intensa, subsp. nov.

♂. Differs from *A. personata personata* (Sharpe, P.Z.S. 1895, p. 471, no. 38), from Somaliland, in the head and neck being greyish chocolate-brown with black shaft-stripes, *not* cinnamon-grey. Back and rump deep greyish chocolate very heavily marked with black ; wings and upper wing-coverts brown-black edged with chocolate-rufous. In *A. p. personata* all the greyish-chocolate markings on wings and coverts and on the back and rump are cinnamon-grey. Below, the throat is more extended but less pure whitish, rest of underside deep cinnamon greyish brown, not pale vinous as in *A. p. personata* ; ear-coverts greyish chocolate, brown-black facial mask much darker and more extended. Iris brown, bill yellowish brown, feet fleshy pink.

Type, ♂, Chanler's Falls, N'Guaso Nyiro River, December 14, 1920, Noel van Someren Coll. 1 ♂ *paratype*, N'Guaso Nyiro, December 10, 1920, received from Dr. van Someren.

Mr. E. C. Stuart Baker forwarded the following remarks on the Nightjar, *Caprimulgus monticolus* :—

In 1926, when working on the Indian Nightjars, I found that there were three well-marked races of *Caprimulgus monticolus* of Franklin, the type-locality of which is Calcutta–Benares ; but, as other ornithologists were then working on the more Eastern Avifauna, I refrained from naming the unnamed forms ; at Mr. J. D. La Touche's request I now do so.

There appear to be three races quite easily distinguishable from one another and which are quite sufficiently constant over certain definite areas. First there is the pale typical form, which extends over practically the whole of India, excluding the North-East, from Sikkim, Assam, extreme

Eastern Bengal to Burma. In Formosa we have Swinhoe's *Caprimulgus m. stictomus*, a very dark grey bird with but little rufous. Thirdly, in China we have a deep rufous race which does not appear to have ever received a name, as *digitalis*, so recorded on some of the Chinese and Formosan specimens in the British Museum, appears to be merely an unpublished alternative name of Swinhoe's for his Formosan bird, the name, in his handwriting, appearing also on the label of his type-specimen of *C. m. stictomus*.

These three races are easy to deal with, but the birds from Sikkim to Burma are apparently again different, generally darker than the pale Indian form, much less rufous than the Chinese, less dark iron-grey than the Formosan. On the confines of their range these birds merge into the Indian and Chinese forms, as, indeed, practically all subspecies grade into those adjoining them. The race, however, although varying considerably *inter se*, seems to be distinguishable over a very wide area and should be recognized. I therefore accept the following four subspecies of *Caprimulgus monticolus* :—

(1) Caprimulgus monticolus monticolus.

Caprimulgus monticolus Franklin, P.Z.S. 1831, p. 116 (Calcutta–Benares). Type no longer in existence.

Description. This is the palest of all the races, though the depth of colour varies greatly, ranging from a pale sandy or slightly rufous grey to a light iron grey. The black markings on the scapulars and interscapulars also vary greatly in extent, and consequently in their effect on the plumage-tint generally. The under surface is paler than in any of the other races, and the rufous markings paler and less dominant.

Distribution. All India from Travancore to Sind and the Sub-Himalayan Terai on the West and from Madras to Orissa, Behar, and Western Bengal on the East. Birds from Travancore average darker than others, whilst specimens from Sind and the extreme North-West average paler, but there is no constant difference, and the overlapping is great.

Examined. 67 specimens.

(2) **Caprimulgus monticolus burmanicus**. subsp. nov.

Type in the British Museum, ♂, Brit. Mus. Reg. no. 1903.12.11.11. Upper Chindwin, Burma.

Description. A darker, more rufous bird than the preceding, both on the upper and lower plumage, but showing no rufous on the forehead and crown except in very rare instances and then only in the more Eastern parts of its range.

Distribution. Sikkim to Eastern Assam, Eastern Bengal, the whole of Burma, Siam, Cambodia, and Cochin China. The majority of the specimens obtained in Annam are of this race, though many have the colouring very rufous and show a close approach to the deep rufous Chinese form, one specimen from Nhatrang on the S.E. coast having the crown very rufous, as in that subspecies.

Examined. Sikkim to Bhutan Duars, 4 specimens ; Assam and E. Bengal, large series ; Burma, 14 specimens ; Siam, 1 specimen ; Annam, 9 specimens.

(3) Caprimulgus monticolus stictomus.

Caprimulgus stictomus Swinhoe, Ibis, 1860, p. 47 (Apes Hill, South Formosa).

Description. General tone of plumage a dark iron grey. The rufous of the upper parts pale and much restricted ; the crown heavily marked with black, but with little or no rufous ; below, the rufescent tinge is reduced to a pale dull buff. This is the darkest and most grey of all the races.

Distribution. Formosa. A single specimen from Laos, French Indo-China, wrongly sexed ♀, is not separable from the Formosan birds, but this is probably only an individual coloration, whilst a series would assuredly show nearer affinities to *C. m. burmanicus.*

Examined. Formosa, 6 specimens ; Laos, 1 specimen ?

(4) **Caprimulgus monticolus amoyensis**, subsp. nov.

Type in the British Museum, ♀, Brit. Mus. Reg. no. 18.98.12.2.417, Amoy, S.E. China. Swinhoe, 18.10.1857.

Description. Much more rufescent than any of the other races, the rufous generally being the dominant colour on the forehead and fore crown and, sometimes, on the entire crown to the rich rufous patch on the hind neck ; the buff on the

lower parts is deeper and more tinged with rufous, and the rufous markings on the underparts and wings deeper and richer in colour.

Distribution. South and South-Eastern China. A specimen from Nhatrang, Annam, is as rufescent as the Chinese birds, North Annam being probably the meeting-place of *C. m. amoyensis* and *C. m. burmanicus.*

Examined. Amoy, 1 specimen; Canton, 1 specimen; Kwangsi, South China, 3 specimens; Macao, 2 specimens.

In comparing series of Nightjars, young birds must be eliminated, as these are invariably very pale and generally very rufous. I have accordingly not included any such in the specimens noted above as having been examined.

The measurements of the four races show that, whilst individual variation is very great, there appears to be no subspecific difference of any value and, again, that the difference in size of the two sexes is so small as to be negligible. Certainly the fact that *C. m. burmanicus* averages much larger than the other races cannot be overlooked, but there remains also the fact that a most typical female of *C. m. stictomus* measures 206 mm., only 1 mm. less than the largest male *C. m. burmanicus.*

The following table gives details in millimetres of the wing-measurements of the large series examined :—

	Average.	Maximum.	Minimum.	Average, both sexes.
C. m. monticolus, ♂	190	201	184	189·5
♀	187	199	180	
C. m. stictomus, ♂	186	189	184	186
♀	185	190	178	
C. m. amoyensis, ♂	186	194	186	186
♀	186	206	179	
C. m. burmanicus, ♂	196	207	194	195·5
♀	190	194	188	

Capt. C. H. B. Grant sent the following note :—

In Part I. of the 'Systema Avium Æthiopicarum,' p. 92, Mr. W. L. Sclater gives the southern range of *Pternistis leucoscepus infuscatus* Cab. as the Pangani River country, and as the work of Friedmann, Bull. U.S. Nat. Mus. 153, 1930,

p. 123, does not extend the range of this Francolin south or west of this locality in Tanganyika Territory, it may be of interest to record its presence on the Kondoa–Dodoma main road at two localities: at the Haneti (Mbuyuni) Swamp, 40 miles south of Kondoa (in about the same latitude as Pangani Town), and at Makatapora, 84 miles south of Kondoa, and only 15–16 miles north of Dodoma. The specimens collected are most probably *P. l. infuscatus*, and are being presented to the British Museum.

I believe that this Francolin is found even further south, as I recollect seeing a dead bird in the hands of an officer in 1916, who had shot it on the railway line somewhere between Dodoma and Kilosa.

The two places I have seen this bird agree well with the habitat as recorded by Zedlitz, in North-East Africa, J. f. Ornith. lviii, 1910, pp. 355–356: higher altitudes of the Haneti Swamp 3800 feet above sea level, and the Makatapora Swamp about 3300.

In the Bull. B. O. C. li. 1931, p. 57, "on rocks at Sumbwa Point" should read "on rocks at Kibwesa Point," a mistake which is mine and not the Editor's.

Mr. P. F. Bunyard sent the following communication :—

On the evening of April 14, 1915, he had just returned from Hampton, Middlesex, and was walking over Waterloo Bridge when his attention was attracted by a great commotion among the Black-headed Gulls (*Larus ridibundus ridibundus*) there, and, to his surprise, he found the cause of the trouble was that they were being harried by two Great Skuas (*Catharacta skua*). The latter crossed over the bridge, coming right over his head, when he at once recognised them. The chase was continued in the direction of Battersea Bridge, the screaming of the Gulls continuing.

They were lighter birds than those he had seen breeding in the Faroes, and were possibly immature, though most of the Gulls had already assumed the black hood. Seeing Dr. Carmichael Low's note on the Great Skua (*Catharacta skua*) in the 'Bulletin,' li. 1931, p. 74, at once reminded him of the occurrence. He was on his way at the time to the Club, and picked up Mr. Clifford Borrer at the Bank,

to whom he mentioned his experience. The date was vividly impressed on his mind through a paper read at the Club the same evening by Mr. C. F. M. Swynnerton on "The Coloration of the Eggs of Birds and of the Mouths of Nestlings."

He made a note of the record at the time in his pocket diary, but during the War did not send up any records.

Richardson's Skua (*Stercorarius parasiticus*) has occurred on the Thames at Battersea, and is recorded in Yarrell's 'British Birds,' iii. p. 633. This record is also claimed for Surrey (Bucknall, 'Birds of Surrey' p. 333), and as his Great Skuas were frequently on either side of the river, he claims this as the first record for Middlesex and Surrey.

Miss C. M. Acland read the following note on a Peregrine Falcon caught in a trap :—

On February 21, 1926, on a large area of marsh-land in South Wales frequented by numbers of White-fronted Geese, Wild Duck of various species, Plover, Snipe, etc., I noticed, a long way off, a collection of feathers on the ground. Anxious to obtain information as to the identity of the deceased I went across and, to my surprise, found a fine male Peregrine Falcon (*Falco peregrinus*) firmly caught in one of four traps set round the body of a White-fronted Goose. The Goose appeared to have been dead for some days and rats had presumably been at the body, for the intestines had been dragged away to a distance, and were already shrivelled and dried up. The body, also, was almost entirely denuded of feathers. It was only by the head that I was able to be sure of the identification. The Peregrine, a very grey bird, was held by one leg, the tibia being badly fractured and the muscles torn. It appeared as if the bird had been trying to free itself by biting through the leg, as its beak and forehead were covered with fresh blood. Having no knife with me to complete the operation, as I felt that this would be the most merciful treatment, I freed the Peregrine and wrapped it in my coat to take it back and get help. Unfortunately it came on to rain heavily, and in trying to transfer the bird to something else it escaped; though at first unsteady in flight, it eventually got well on the wing, and turned towards the hills.

It seems most unusual to find a Peregrine coming down to carrion and in a trap, so I felt it might be of interest to put this on record. It is possible, of course, that the Goose was originally killed by the Peregrine, but he was so strong that I should judge that he had not been in the trap for very long.

Mr. H. P. O. CLEAVE sent the following note upon Crossbills (*Loxia curvirostra curvirostra*) in Berkshire :—

The year 1931 may well be described as a Crossbill year for Berkshire, as, during a residence of 15 years in that county, this is the first time I have seen any, although a few have been noted by other observers at rare intervals.

A flock of about ten was seen on March 11 in a fir-wood near Burghfield, 9 miles from Reading, and some remained, though in diminishing numbers, up to the end of the month. On the last day, the 31st, there were two pairs in the same wood, in full breeding-plumage.

Though unable to locate a nest as yet, I feel sure they are breeding, and intend to make a further search.

They seemed to keep to the same wood all through, and were seen by several ornithologists, including Mr. J. L. Hawkins, of Reading.

NOTICES.

The next Meeting of the Club will be held on Wednesday, May 13, 1931, at PAGANI'S RESTAURANT, 42–48 Great Portland Street, W.1. The Dinner at 7 p.m.

Members intending to dine are requested to inform the Hon. Secretary, C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7.

Members who intend to make any communication at the next Meeting of the Club should give notice beforehand to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1, and give him their MSS. for publication in the 'Bulletin' not later than at the Meeting.

Bird Room.

6 JUN 1931
PURCHASED

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCLI.

BRITISH MUSEUM
1931
NATURAL HISTORY

THE three-hundred-and-forty-sixth Meeting of the Club was held at Pagani's Restaurant, 42–48 Great Portland Street, W.1, on Wednesday, May 13, 1931.

Chairman : Major S. S. FLOWER.

Members present :—H. G. ALEXANDER ; W. B. ALEXANDER ; E. C. STUART BAKER ; F. J. F. BARRINGTON ; GEORGE BROWN ; P. F. BUNYARD ; H. P. O. CLEAVE ; Sir P. Z. COX ; Lt.-Col. A. DELMÉ-RADCLIFFE ; Miss J. M. FERRIER ; Dr. A. E. HAMERTON ; T. H. HARRISSON ; E. HOPKINSON ; Miss D. HORDERN ; Dr. KARL JORDAN ; N. B. KINNEAR ; Miss E. P. LEACH ; BERTRAM LLOYD ; Dr. G. CARMICHAEL LOW (*Editor*) ; H. T. MCKITTRICK, Jr. ; C. W. MACKWORTH-PRAED (*Hon. Sec.*) ; Dr. P. MANSON-BAHR ; Lt.-Col. H. A. F. MAGRATH ; G. M. MATHEWS ; C. OLDHAM ; B. B. OSMASTON ; W. L. SCLATER ; D. SETH-SMITH ; Major M. H. SIMONDS ; C. G. TALBOT-PONSONBY ; MARQUESS of TAVISTOCK ; A. LANDSBOROUGH THOMSON ; B. W. TUCKER ; H. M. WALLIS ; VICTOR O. WILLIAMS ; H. F. WITHERBY ; C. G. M. DE WORMS.

Guests :—W. MIDDLETON ; J. D. WOOD.

Mr. H. F. Witherby referred to Lord Rothschild's statement at the April meeting (see 'Bulletin,' vol. li. p. 99) that of British examples of the American Wigeon (*Mareca americana*) "the greater proportion of the genuine records have been obtained off the west coast of Ireland." Mr. Witherby stated that he did not know of any authentic records of the American Wigeon in Ireland. The species was not included in Ussher and Warren's 'Birds of Ireland' (1900) nor in Ussher's 'List of Irish Birds' (1908), nor in the second edition (1924) by A. R. Nichols of that 'List.' Mr. Witherby stated that there were very few occurrences of the American Wigeon which were not open to the suspicion of being birds which might have been put down full-winged or might have been the progeny of semi-captive birds. There was a previous record from the Outer Hebrides (Benbecula, ad. ♂, shot Jan. 3, 1907). An adult male was identified by Mr. C. Oldham in Anglesey in June 1910, another by Messrs. Anderson and Bartholomew at Bardowie Loch in December 1919, and another by Miss Rintoul and Miss Baxter in Fifeshire in November 1919. There were also two older records from game-stalls, but the origin of these birds was uncertain. In view of the fact that other species which had been put down full-winged had been proved to wander widely, it might be said that most of the records of the American Wigeon were open to doubt.

Dr. Karl Jordan exhibited the stomach-contents of a pair of the Great Crested Grebe (*Podiceps cristatus cristatus*), and said that these birds were found dead on March 15, 1931, at the Tring Reservoir, washed ashore when the ice began to disappear. At the suggestion of Mr. Charles Oldham, who was present when the birds were found, an autopsy was made in order to ascertain the cause of death. In both birds the lungs were observed to be full of water, the crop to be empty, and the stomach to contain broken-up green vegetable matter mixed with a quantity of feathers. Death was due to drowning; the birds had evidently dived under the ice and been unable to find their way back to the air. The feathers in the stomachs are those of the Great Crested

Grebe, and, no doubt, were plucked off when the birds preened themselves, and swallowed, possibly, on account of the oil deposited on them. The birds had not quite completed the moult.

[Dr. Jordan brought this exhibit for the previous meeting; but, owing to his having to leave early, was unable to show it.—Ed.]

Mr. W. L. Sclater exhibited and described three new birds from Amani Forest, in the Usambara District of Tanganyika Territory, recently obtained by Mr. R. E. Moreau:—

Apalis moreaui, sp. nov.

Nearest, perhaps, to *Apalis chirindensis* and *A. alticola* from the Chirinda Forest of S. Rhodesia and from Fife in the highlands between Lakes Nyasa and Tanganyika respectively. It is distinguished from both, however, by its much longer and more slender bill and by its shorter tail, which is composed of eight feathers only in the only three specimens available for examination. These tail-feathers are very narrow and much graduated, the outer pair being about two-thirds the length of the longest. There are no traces of the white tips to the tail characteristic of the other species, but the tails of all three examples are a little worn, and if the tips were present they might have been worn off. The wing is short and rounded, the outer primary being about half the length of the longest, which are the fourth and fifth. The tarsus is long and is covered in front by several transverse shields, while behind it has only one long plate. Finally, there are two short rictal bristles only.

General colour above dusky grey throughout, becoming slightly tinged with rufous-brown on the forehead; below pale slaty grey, becoming almost white on the throat and abdomen, and with a tinge of brown on the tarsal feathering; under wing-coverts white, extending to the outer edge of the wing.

Iris pale brown, bill black, becoming whitish at the tip, especially of the lower mandible; feet pale brown to flesh.

Measurements.—Length about 120 mm., weight 8·5 to 9 grm., wing 45 mm., tail 48–51 mm., culmen 15 mm., tarsus 20 mm.

Type, a male obtained in forest at 3000 ft. near Amani, in the Usambara District of Tanganyika Territory, on December 14, 1930, marked "Not breeding." Collected by R. E. Moreau. Collector's no. 414. Brit. Mus. Reg. no. 1931.5.7.1.

Three specimens, all males, have been received from Mr. Moreau; the other two both from Amani, and dated December 28, 1930, and January 1, 1931.

I hesitate to create a new genus for this Warbler until the genus *Apalis* has been carefully revised, but I believe that the length of the bill and number of tail-feathers, if confirmed by the examination of additional examples, will certainly entitle it to generic distinction.

It is a little bird of very great interest, and I have much pleasure in attaching to it Mr. Moreau's name, as he has been instrumental in enriching the Museum collection with many rare and novel birds from Amani and its neighbourhood.

Chlorophoneus nigrescens, sp. nov.

Above, the crown and shoulder slaty grey, the rest of the upper parts dark green, quite indistinguishable from those of *C. nigrifrons* or *C. rubiginosus*; below, the throat, sides of the face and neck, and the upper chest sooty black, becoming posteriorly gradually replaced by green of much the same shade as the upper parts; under wing-coverts partly green and partly yellow. No trace of the yellow tips to the tail-feathers as in *C. nigrifrons* and *C. rubiginosus*. Iris carmine, bill black; feet greyish, with yellow soles.

Measurements of the type and only example:—Length about 190 mm., wing 92 mm., tail 87 mm., tarsus 22 mm., culmen 14 mm.

Type, a male with somewhat enlarged testes, was taken in forest near Amani in the Usambara District of Tanganyika Territory on March 19, 1931, by Mr. R. E. Moreau. Collector's no. 709. Brit. Mus. Reg. no. 1931.5.7.4.

Of this exceedingly interesting bird Mr. Moreau writes as follows :—

" As you know, this is the second time this black-breasted *Chlorophoneus* has been taken at Amani, and several interesting points are raised. We get here *C. nigrifrons* and *C. rubiginosus*, the former the commoner. Both are confined to the heavy Rain-forest, from which the new *Chlorophoneus* came. *C. nigrifrons* and *C. rubiginosus* may be seen feeding in company, and their voices are, to me, indistinguishable.

" Our *rubiginosus*, *nigrifrons*, and the new one all have identical upper parts, and my collector tells me that the new bird's call is exactly like that of the other species. Further, the new bird, a male, was shot in company with what appears to me to be an ordinary female *nigrifrons* (also sent). (But I do not know how much weight to attach to that, since, as I said, *nigrifrons* and *rubiginosus* have been seen together.) The suggestion obtrudes itself that the new bird may be a melanistic sport of one of the others, probably *nigrifrons*. But, if so, it is surely surprising that two have been got here where so little collecting has been done, and none in Kenya (so far as I know). Further, although the new bird looks like a *nigrifrons*, with the yellow on the underparts substituted by black, yet the yellowish under wing-coverts persist. Moreover, the yellow tail-tips in *nigrifrons* are not replaced by black tail-tips—the new bird shows no tips at all. In fact the new bird resembles *nigrifrons* just as much as they both resemble *rubiginosus*, neither more nor less. The grouping of these three birds is curiously like that of *C. multicolor*, *C. melamprosopus*, and *C. nigrithorax*.

" It will be interesting to see whether it bears the same relation (in appearance) to *nigrifrons* as *nigrithorax* does to *multicolor*."

It is very remarkable that three such closely allied forms should be found not only in the same locality, but in company with each other. It seems difficult under our present ideas to regard them as distinct species or subspecies. Whether they can be regarded as examples of mutation, that rather facile explanation so ofter applied, but so little understood, must remain in doubt for the present. We hope Mr. Moreau,

by his field-observations, may be able to throw further light on this interesting problem.

Dioptrornis fischeri amani, subsp. nov.

Resembling *D. f. fischeri*, but smaller and very much paler; back a silvery slate, rather like a bluish slate, and below also paler, and with no brown tinge. The circle of white plumelets round the eye is about as well developed as in the typical race.

Measurements.—Length about 145 mm., wing 80 mm., tail 65 mm., culmen 13 mm., tarsus 12 mm.

The wing of the typical race, which ranges over the greater part of Kenya Colony from Elgon to Kilimanjaro and the northern and dryer part of Kenya Colony, averages 90 mm.

Type, a female obtained by R. E. Moreau near Amani in forest at about 1300 ft. and marked "Not breeding." Collector's no. 541. Brit. Mus. Reg. no. 1931.5.7.5.

Only the single example here described has been obtained up to now by Mr. Moreau.

Mr. P. F. Bunyard exhibited a large series of eggs of the Snow-Bunting (*Plectrophenax nivalis*), from Greenland and Iceland, and made the following remarks :—

In 'The Ibis' for January last, pp. 57–70, there appeared a very interesting and exhaustive article on the various forms of the Snow-Bunting by Finn Salomonsen, in which he states that Schiøler in 1926 ('Dänmarks Fugle,' vol. ii. p. 48) called attention to the fact that the Greenland Snow-Buntings were different to the European, claiming that they were larger than the typical birds from Lapland.

He further stated, however, that Mr. E. M. Nicholson had been unable to confirm this, though he had only a few birds, *i. e.*, three males and four females (Ibis, 1930, p. 296).

Owing to the disagreement on this point between Schiøler and Nicholson, Salomonsen examined a large number of skins, but was unable to succeed in finding any great difference between the Greenland, Iceland, and Scandinavian specimens, except in the plumage.

As the result of measuring and weighing fifty-six eggs from W. Greenland, and an exactly similar number from Iceland, I am led to believe that Schiøler's original claim, *i. e.*, that the Greenland bird is larger, will eventually be proved correct.

It will at once be seen from the following figures that the eggs from Greenland are very much larger and heavier than those from Iceland, the difference being most marked in the shape of the former, *i. e.*, the average length-measurements are considerably higher.

Measurements.

56 eggs each.

Plectrophenax nivalis subnivalis.		*Plectrophenax n. insulæ.*	
Average	23·2 × 16·7 mm.	Average.....	21·8 × 16·1 mm.
Max.....	25 × 17·1 „	Max.	23 × 16·4 „
Min.	21·2 × 17 „	Min.	20·2 × 16 „

Weights.

56 eggs each.

Average	185 mg.	Average	163 mg.
Max.....	223 „	Max.	197 „
Min.....	150 „	Min.	134 „

I am greatly indebted to Major Congreve for the loan of his self-taken Icelandic eggs, without which it would have been impossible to have made a conclusive comparative study. No other Icelandic eggs were used for the foregoing average.

The Congreve series consisted of clutches of fives, sixes, one seven, and one four; they are a little warmer in the ground-colour than the Greenland eggs, but on the average not so heavily marked. One Icelandic clutch of six is worthy of special mention; they have the typical *Emberiza* vein-like markings (which is unusual for the eggs of this species), with suffused, superimposed, and conspicuous under-laying markings. Another richly-coloured clutch of six has the markings in the form of a zone near the large ends. I have never received from W. Greenland clutches containing more than six. E. M. Nicholson, however, records a clutch of seven from E. Greenland (Ibis, p. 298). Hagerup mentions five to eight ('Birds of Greenland,' p. 59).

Among the eggs in my Greenland series the following clutches are of outstanding interest:—A clutch of six eggs show large suffused markings of pale reddish brown, mostly confined to the large ends; another clutch of six are heavily capped with reddish brown, with a few vein-markings of brownish black; a clutch of six are finely stippled, like those of certain forms of *Anthus* eggs; a clutch of five have the ground-colour almost as greenish blue as those of the British Bullfinch (*Pyrrhula p. pileata*), with stippled markings forming caps of rich brown, on which there are a few fine hair-like lines; another clutch of five have a decided erythristic tendency, the ground-colour being pale reddish instead of the typical pale greenish-blue ground-colour.

I also exhibit a small series of nests from W. Greenland in which were found the following materials:—Feathers of Ptarmigan (*Lagopus m. reinhardti*), used freely as a lining, also of Northern? Eider—in one nest there were 321 feathers; grasses, two species with flowering heads; mosses, two species; ground-lichen; dwarf flowering rush; rootlets; willow bast; a flower in the dry state of *Cerastium* (? *arcticum*); blue, black, white, and greenish worsted; cotton wool; and fox ? hair.

In some cases old nests had simply been relined, a habit I have noticed with the Wood-Lark (*Lulula arborea*) on several occasions. Hagerup also mentions this habit ('Birds of Greenland,' p. 37).

Unfortunately for my purpose, Salomonsen gives the measurements of seventy-three males and twenty-six females from widely separated localities, mostly from the south—Godthaab, for instance, is nearly 400 miles south of Godhavn where my eggs come from. The evidence of these eggs is so conclusive that I am led to believe that a further examination of birds from the Godhavn districts will amplify my suspicions.

Mr. David Bannerman forwarded the descriptions of a new race of Rosy-grey Dove from Nigeria and French Sudan, and of the Laughing-Dove from São Thomé, which he proposed to name

Streptopelia roseogrisea bornuensis, subsp. nov.

Compared with the typical species of this race is darker throughout, but the difference is most noticeable on the undersurface, the breast deeper vinaceous, with a plum-coloured wash which extends almost on to the belly. Specimens of the typical species from the Sudan and Darfur are much whiter on the underside.

Type in the British Museum, adult male. Maidugari, Bornu, N. Nigeria, collected by the late Claude Francis, December 20, 1922. (G. L. Bates's collection, no. 7240), Brit. Mus. Reg. no. 1923.10.26.8.

Range.—N. Nigeria : Provinces of Bornu, Sokoto, and Kano, extending west to Say, on the Niger. In French Sudan has occurred at Zinder and again at Aïr.

Stigmatopelia senegalensis thomé, subsp. nov.

Intermediate in colour between *S. senegalensis senegalensis*, which has the cinnamon-rufous on the scapulars and coverts very bright, and *S. senegalensis æquatorialis*, in which the upper parts are much browner, the cinnamon-rufous duller and less extensive.

In the race here described the cinnamon-rufous is paler than in the typical species, but the colour is equally distributed ; the rump is bluer, as in *æquatorialis*. The best distinction is to be found in the colour of the head, which in the island form is paler vinous, more mauvish-plum colour than in either of the mainland races, and this colour extends further on to the mantle and shoulders.

Wing 135–140 mm.

Range.—Restricted to São Thomé Island in the Gulf of Guinea.

Type in the British Museum, adult male. Zalma, São Thomé, Feb. 5, 1909. Boyd Alexander Coll. Brit. Mus. Reg. no. 1911.12.23.4014.

Mr. Bannerman also sent the following communication drawing attention to the Rock-Pigeons of the Azores and Madeira, and said that, whatever the origin of these birds was, he believed the time had come when they should receive a name

by which they could be referred to in literature. There is a very considerable series from these islands in the British and Tring Museums, mostly obtained in the Azores by Mr. W. R. Ogilvie-Grant.

In the report on this collection in the 'Novitates Zoologicæ,' vol. xii. 1905, p. 94, Dr. Hartert lists them under *Columba livia* aberr., and in his 'Vögel Paläarktischen Fauna' he refers to them in a footnote to *C. livia livia* where one finds them only by chance. In the former paper, after referring to their apparent origin from domestic Pigeons, he remarks that it is not without interest to see that they are generally (like those from Madeira) of the same style of coloration. They are, indeed, so distinct in their blackish-slate colouring, although showing individual variation in the amount of grey on the mantle and wing-coverts, and in some having white, others grey rumps (a character which we know to be variable in other races of *C. livia*), that they cannot easily be confused with any known race of the Rock-Pigeon.

These birds may, as has been suggested, have descended from domestic Pigeons imported into the islands generations ago—the uniformity which they show suggests ancient origin—or again their ancestors may have been wild *C. livia* which have crossed with an imported domestic breed. The result, at any rate, is a Rock-Pigeon which has developed individual characters which have become stabilised to a remarkable extent, and which are obviously transmitted from parent to young.

Surely, therefore, it will simplify matters if these Doves can be referred to in literature and in museums other than by the unsatisfactory methods hitherto adopted—*C. livia* subsp., *C. livia* var., *C. livia* aberr., etc., etc.! I therefore propose to distinguish them as

Columba livia atlantis, subsp. nov.

Type, adult male, in the British Museum. Above Rosario, Corvo, Azores, April 14, 1903. W. R. Ogilvie-Grant Coll., no. 368. Brit. Mus. Reg. no. 1904.12.31.308.

Habitat.—The Azores and Madeira groups of islands, probably also the Cape Verde Islands (one examined), but *not* the Canaries.

Mr. N. B. Kinnear communicated the following note on behalf of Dr. B. Stegmann :—

In the February number of the ' Bulletin,' p. 71, Dr. C. B. Ticehurst criticised the validity of my *Strix aluco obscurata*, which he suggested was the same as *S. aluco willkouskii* Menzbier.

There are in our Zoological Museum Menzbier's original specimens, one from the Shusha District and the other from the vicinity of Batum, and, in addition, examples since received, from Vladi-Caucasus, Novorossijsk, and Majkop. All of these specimens are uniform dark brown, near " Brussels brown " (Ridgway, pl. iii.), or darker, with black sides of the head and black spots on the upper and undersides.

As the typical form of Tawny Owl also occurs in the Caucasus, it is clear that *S. willkouskii* is only a melanistic variation analagous with the dark variety of *S. uralensis* in the Alps. I did not mention this in my description, as I considered this fact to be known by everybody.

S. aluco obscurata can be considered as a darker geographical race of Tawny Owl occurring in Talysh and the southern shores of the Caspian Sea. It is known from specimens in the Zoological Museum of the Academy of Science at Leningrad, the Stockholm Museum, and the Berlin Museum (Stresemann, J. f. O. 1928, pp. 399–400).

Mr. H. B. Booth has written to point out that a misunderstanding has arisen in connection with Dr. P. R. Lowe's note on the hybrid Red-Grouse (*Lagopus scoticus*) × Blackgrouse (*Tetrao tetrix*) from Yorkshire, which he exhibited at the December meeting (vol. li, pp. 42–43). Dr. Lowe stated that " unfortunately, the bird was not weighed, nor was its body preserved." This has been taken by some people to mean that the skin was not kept, and Mr. Booth writes to say that the bird is mounted " and in the possession of Mr. Paul Astley, Posley Bridge, Penrith, who will be pleased to show it to anybody interested."

NOTICES.

The next Meeting of the Club (the last of the Session) will be held on Wednesday, June 10, 1931, at PAGANI'S RESTAURANT, 42–48 Great Portland Street, W. 1. The Dinner at 7 p.m.

Members intending to dine are requested to inform the Hon. Secretary, C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7.

Members who intend to make any communication at the next Meeting of the Club should give notice beforehand to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1, and give him their MSS. for publication in the 'Bulletin' not later than at the Meeting.

Bird Room.

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCLII.

NATURAL HISTORY

The three-hundred-and-forty-seventh Meeting of the Club was held at Pagani's Restaurant, 42–48 Great Portland Street, W.1, on Wednesday, June 10, 1931.

Chairman : Major S. S. Flower.

Members present :—D. A. Bannerman ; P. F. Bunyard ; A. L. Butler ; H. P. O. Cleave ; Sir Percy Z. Cox ; Lt.-Col. A. Delmé-Radcliffe ; A. G. Glenister ; Rev. J. R. Hale ; Lt.-Col. A. E. Hamerton ; Dr. E. Hartert ; R. E. Heath ; Dr. E. Hopkinson ; Rev. F. C. R. Jourdain ; N. B. Kinnear ; Miss E. P. Leach ; Dr. G. Carmichael Low (*Editor*) ; Dr. P. R. Lowe ; Dr. N. S. Lucas ; T. H. McKittrick, Jr. ; C. W. Mackworth-Praed (*Hon. Sec. & Treasurer*) ; Dr. P. Manson-Bahr ; J. L. Chaworth Musters ; Lord Rothschild (*Vice-Chairman*) ; Lord Scone ; D. Seth-Smith ; Dr. A. Landsborough Thomson ; Dr. C. B. Ticehurst ; B. W. Tucker ; H. M. Wallis ; H. Whistler.

Guests present :—Rev. F. L. Blathwayt ; P. W. T. Boughton-Leigh ; Mrs. S. S. Flower ; G. P. R. Hale ; Dr. D. W. Seth-Smith.

The Rev. F. C. R. Jourdain gave an account of his recent visit to Palestine and Syria. He landed at Jaffa on April 6, 1931, and left shortly afterwards for Jerusalem. *Streptopelia senegalensis*, the Laughing Dove, was noted on the station buildings at Jaffa. For some distance from the town the line runs through orange-groves, and gradually enters the bare hill country of Judæa, which is rather poor in bird-life except in the wadis. In the town of Jerusalem, except for the great numbers of Black Swifts and a few Kestrels, there is not much to record, but a few days' exploration of the valleys some twenty kilometres north-westward produced interesting results. Numbers of small birds were evidently passing through on migration, but attention was mainly directed to the breeding species. The two prevalent Chats are *Œnanthe hispanica melanoleuca* and *Œ. lugens lugens*, but they are not nearly so plentiful as *Œ. leucomela cypriaca* is in Cyprus. Scattered pairs of Ravens (*Corvus corax laurencei*), the Egyptian Vulture (*Neophron percnopterus*), and *Buteo rufinus* subsp. breed in the wadis where there are rocks big enough to provide nesting-sites. *Circaëtus gallicus*, the Short-toed Eagle, is widespread, nesting in quite small trees and bushes on rocky bluffs. The speaker was fortunate in finding a nest of the Lanner (*Falco biarmicus*? *tanypterus*) with a fine well-grown young bird and no fewer than four addled eggs. Blue Rock-Thrushes (*Monticola solitarius*) were not uncommon, and, where there was covert, *Pycnonotus capensis vallombrosæ*, *Sylvia melanocephalus momus*, and, of course, *Carduelis carduelis niedecki*, occurred in fair numbers. In some of the towns Lesser Kestrels were extremely common, especially at Nablus, but isolated pairs of Common Kestrels bred in holes of rocks or buildings all over the country. Chukor (*Alectoris græca cypriotes*) were also common. In the hill country *Hirundo daurica rufula* seemed to replace the local race of Swallow (*H. rustica transitiva*), which is a bird of the plains, breeding chiefly in the Arab villages and avoiding the Jewish settlements. Both Scops and Little Owl were noted frequently. This list is, of course, not exhaustive, as many other species were observed. Flocks of Storks, sometimes

70 to 100 in number, migrated slowly northward, resting and feeding as they went, and wherever there were trees the Hooded Crow was sure to be seen.

The next district visited was the Dead Sea region and the lower Jordan Valley, some 1400 feet below sea-level, with a tropical climate. Here nesting was much more advanced, and a very different fauna was met with. In the wadis the Brown-necked Raven (*Corvus corax ruficollis*) was breeding commonly, while a few pairs of the Fantail Raven (*C. rhipidurus*) and Tristram's Grackle (*Onychognathus tristramii*) haunted restricted areas near the Dead Sea. The latter species breeds in crannies far in among the rocks, and there was no sign of the stick-built nests on ledges as described by Col. Meinertzhagen. Mr. Aharoni informed us that he had taken about fifteen nests of the Fantail Raven in different seasons, so that the eggs cannot be said to be "unknown," as stated in the 'Birds of Egypt.' In the Ghôr we made the acquaintance of *Prinia gracilis palestinæ*, and heard its characteristic trill all day in the gardens, where *Streptopelia decaocto* was fairly common and *Lanius excubitor aucheri* was nesting in almost every tree. The Kestrels here are said to be of the Egyptian race, and the eggs supported this statement. *Ammoperdix heyi* haunted the wadis, as well as the pale race of Chukor (*Alectoris græca sinaica*), and an occasional Stone-Curlew stalked about the plain. Near the Jordan we heard the songs of Nightingales and Cetti's Warblers, while the conspicuous nests of the Moabite Sparrow were to be seen in numbers in the tamarisks. Large colonies of *Passer hispaniolensis transcaspicus* were also breeding in thorny scrub in the open country, but all the nests contained young. We found one nest of the Sun-bird (*Cinnyris osea*), but, unfortunately, it had not yet laid, while on the hillsides a few pairs of *Scotocerca* and *Cercomela* were seen, as well as *Anthus sordidus eaptus*. Even more interesting was a young Owl just able to fly, which was caught by an Arab and brought to me. It was a juvenile *Strix butleri*, greyer and more definitely marked than the old birds, of which I was afterwards shown skins by Mr. Aharoni. Only four specimens of this rare Owl had been

obtained up to this year. Two other species deserve mention—the local race of Rock-Sparrow, which breeds in colonies among the cliffs of the wadis, and the Jackdaw, which is almost as local here as in North Africa. We only met with it in three places in Palestine, yet in the town of Nablus it is one of the commonest birds. *Hippolais pallida elaeica* and *Lanius nubicus* are both late breeders, and had not begun to nest. Walking back to Jericho on the evening of April 14, over 300 Falcons were sailing about high overhead : they were Kestrels, but we failed to secure one, and could not be certain of the species.

One striking feature as compared with Tristram's description of the bird-life is the comparative scarcity of the Griffon Vulture (*Gyps fulvus*). It is still common enough in Transjordania, but in Palestine one can travel for weeks without seeing a bird where Tristam met with it in hundreds. Yet *Neophron percnopterus* is as common as ever, and we counted twenty (most of which had probably got mates sitting) as we passed along the side of the Hermon Range in Syria.

A visit to the papyrus swamp in Lake Huleh was an interesting experience. The Arabs have cut a canal through the swamp, which can be navigated on bundles of papyrus stalks. Cetti's Warbler is the characteristic bird of the swamp, and its bursts of song were heard at short intervals. A few pairs of Marsh-Harriers (*Circus æruginosus*) also evidently breed here, while *Prinia* is not uncommon in the bushes on the shore. North of the papyrus swamp lies the big marsh, where Bittern, Buff-backed Heron, Little Egret, Pygmy Cormorant, and many other species were noted.

Of the visit to Syria it is not possible here to give details, though ornithologically it was even more interesting. Mr. Aharoni had just returned from a long tour in the Syrian desert, and had brought back eggs of *Comatibis*, *Rhamphocorys*, *Eremophila alpestris bilopha*, *Ammomanes deserti coxi*, *Œnanthe moesta*, *Erythrospiza*, etc. From the Hermon and Lebanon districts we also obtained eggs of *Serinus syriacus*, but *Rhodopechys* and *Eremophila a. bicornis* had not yet bred. I regret to say that the little colony of *Larus audouinii* discovered by Surg. Rear-Admiral J. H. Stenhouse, whose death we all

deplore, has been completely displaced through the great increase of a huge colony of *Larus argentatus michahellesii*, which now breeds here in hundreds.

Mr. David Bannerman exhibited a mounted specimen of the rare São Thomé Maroon Pigeon, which he was able to do through the courtesy of Dr. Fernando Frade, who had sent the specimen from the Bocage Museum, Lisbon.

Mr. Bannerman said, as far as he knew, this Pigeon was not represented in any American or European museum other than the one specified, and he was sure the members of the Club would wish to express their appreciation of Dr. Frade's action in sending it to London. The example in question had been collected on Rollas Islet, off São Thomé, by Colonel Francisco Newton, and was named by the late Professor Bocage *Columba arquatrix* var. *thomensis*. It had appeared in all subsequent publications, other than Reichenow's 'Vögel Afrikas,' as a subspecies of *Columba arquatrix*, but Mr. Bannerman was inclined to believe that, owing to its unspotted breast, considerably larger size, and other minor differences, it should take rank as a distinct species—a decision with which Dr. Hartert, who was present at the meeting, concurred.

Mr. Bannerman said that as it was his intention, with Dr. Frade's permission, to figure this Pigeon in colour in a future number of 'The Ibis,' and as he would then have an opportunity to contribute a short article, he did not propose to say more about it just then.

Mr. Percy Boughton-Leigh exhibited various clutches of eggs which he had taken himself at Ilorin, Nigeria, and gave a short account of the country in which the nests had been found. Of special interest were clutches of *Necrosyrtes monachus monachus*, *Accipiter badius sphenurus*, *Gymnogenys typicus pectoralis*, *Ptilostomus afer*, and *Ploceus cucullatus*, several of which were hitherto undescribed.

Mr. Boughton-Leigh drew attention to various handsome or peculiar types, but said that he would not enter into details,

as it had been arranged to figure in colour a number of the most interesting eggs in 'The Ibis,' and he would there have an opportunity to describe them accurately.

Mr. David Bannerman and the Rev. F. C. R. Jourdain both congratulated Mr. Boughton-Leigh on the value of his collection. Mr. Bannerman pointed out that the eggs were all collected under conditions which permitted of no mistaken identities: the parent bird had been secured and sent to him at the British Museum for identification, and from what he had seen of Mr. Boughton-Leigh's methods and note-books he was sure that a most valuable paper would be contributed to 'The Ibis.' Mr. Boughton-Leigh's notes and collections had been supplemented by those of Mr. Ronald Shuel (Northern Nigeria Police), who had very kindly deposited his Nigerian egg-collection in the Museum, so that it might be consulted during the preparation of the paper for 'The Ibis.' Mr. Shuel's collection was of considerable importance to Oologists, and it was to be regretted that it could not be acquired for the National Collection, where it would be accessible to all.

The Rev. F. C. R. Jourdain corroborated what had already been said, and stressed the fact that Mr. Boughton-Leigh was breaking entirely new ground. He hoped that both Mr. Boughton-Leigh and Mr. Shuel would continue the good work on their return to West Africa, and would give the Club a further account of their discoveries.

Mr. A. L. Butler made some remarks upon a supposed new species of the Standard-wing Nightjar (*Macrodipteryx longipennis*).

He said that Mr. Raoul Millais (son of the late Mr. J. G. Millais) had informed him of the existence in Angola of a second species of Nightjar of the genus *Macrodipteryx*.

In December 1925 Mr. Millais was travelling in the country east of the Quanza River in search of Giant Sable Antelope. When camped in a locality the position of which would be between 11° and 12° S. and 18° E., he flushed, in the day-time, a Standard-wing Nightjar which at once arrested his

attention, as it showed a conspicuous spot, or eye, of white on the broad webs of the elongated wing-feathers. This bird Mr. Millais shot and preserved. On another occasion he saw a similar one, which he followed up and flushed several times. The bird was a male, and also showed white eyes on the "standards." This he did not shoot, and these were the only two he encountered. The natives with him, however, knew the bird, but told him it was very scarce. On his way back to the coast Mr. Millais lost a portion of his baggage, including the box which contained his specimen.

Mr. Millais is well acquainted with the Standard-wing Nightjar (*Macrodipteryx longipennis*), and said that if his bird had not been obviously of a different species he would not have shot it. Speaking from memory, he said it was rather larger, had rounder rackets on the elongated feathers, and a white spot on each of these as large as a shilling. These markings caused the rackets to look like broad rings when the bird rose close to him.

The range of *M. longipennis* extends from about 15° N. almost to the Equator. Mr. Butler did not know of any records of it from further south.

In the P. Z. S. for 1873, p. 626, however, Dr. R. B. Sharpe described, under the name of *Macrodipteryx sperlingi*, a Nightjar from Malemba Bay, in Angola, which, though it had no elongated wing-feathers, he believed to represent an unknown species of *Macrodipteryx* considerably larger than *M. longipennis*, with a wing an inch longer and differing in details of coloration. This description has since been regarded as applying to an example of the Pennant-wing Nightjar (*Cosmetornis vexillarius*) and the name *sperlingi* has been relegated to the synonymy of that species. This may be right, but Dr. Sharpe would have been quite familiar with *C. vexillarius*, and in his description he compared his bird with *M. longipennis* as being the most nearly allied species, and stated that the two were strictly congeneric.

Unfortunately his type seems to have disappeared. It is not included in the specimens listed in vol. xvi. of the 'Catalogue,' and was probably only a carbolized bird, as were the remainder of the collection of about thirty specimens

from the Congo given by Commander Sperling to Dr. Sharpe at the same time, and described in the P. Z. S. for 1873, p. 716.

Mr. Butler suggested that Sharpe's *M. sperlingi* might possibly have been the bird which Mr. Millais met with.

The Rev. F. C. R. Jourdain sent the following communications :—

In Dr. P. Manson-Bahr's paper on the breeding display of certain Waders (*anteà*, p. 88) the description of the courtship of the Ruff (*Philomachus pugnax*) is somewhat misleading. Most of the fighting, or rather sparring, of the males is of a spectacular and perfunctory kind, and the "stand" of the male on the hill is certainly not intended to be the permanent abode of the female. The observations of E. Selous have shown that in this species selection rests entirely with the female, and is probably more influenced by external appearances than by fighting powers. For details see E. Selous, 'Zoologist,' 1906 and 1907, summarized by the writer in Kirkman's 'British Bird Book,' iii. pp. 491–494.

In the 'Bulletin' (pp. 112–114) there is a lengthy paper by Mr. P. F. Bunyard giving the measurements of 56 specimens of the Greenland and Iceland races of the Snow-Buntings (*Plectrophenax nivalis subnivalis* and *P. n. insulæ*). The Icelandic eggs are said to be decidedly smaller than those from Greenland, measuring only 21·8×16·1 mm. as against 23·2×16·7 mm. I have the measurements of 56 eggs of the Iceland bird from other collections, and find the average works out at 23·6×15·96 mm.! Mr. Bunyard only gives one maximum and one minimum, though, of course, two should be given in each case.

In such cases averages of not less than 100 specimens should be worked out : smaller series will be found to give unreliable results.

Major C. H. B. Grant sent the following note :—

In the Bull. B. O. C. li. 1931, p. 56, I published a note on the Angolan Swallow (*Hirundo angolensis angolensis.*) I now have to record that I have obtained this species at Kondoa, in Kondoa district on April 6, 1931. The specimen

was a solitary female, and was shot on the tower of the old Boma, where it was sitting in company with several European Swallows (*H. rustica rustica*) and the Wire-tailed Swallow (*H. smithii smithii*).

This record brings this South-West African species very far east, and doubtless it will be found in many localities in Tanganyika Territory, where, however, it may be considered at present a rare species. The specimen obtained will be presented to the British Museum. When compared with the series in the British Museum Collection it may possibly prove to be the Uganda form, *H. angolensis arcticincta* Sharpe.

[The skin in question has since reached the Museum, and is undoubtedly *Hirundo a. angolensis*, though the differences between *H. a. angolensis* and *H. a. arcticincta* are very slight, the latter being rather paler on the underparts.—W. L. S.]

Major C. H. B. Grant recently sent to the British Museum the skin of a duck from Tanganyika which he believed to be that of the Common Teal (*Anas crecca*).

The skin referred to has now reached the Museum, and after a careful examination and comparison by Mr. W. L. Sclater it proves to be a Garganey (*Anas querquedula*), and not a Common Teal. It is remarkable for the total absence of the speculum, but in other respects, and especially in the size of its bill, it is undoubtedly a Garganey. This species has already been recorded as far south as Tabora, in Tanganyika Territory.

Major Grant shot the duck, which proved to be an adult female, on the evening of March 5, 1931. The bird rose from the edge of the grass bordering a lake, one and a half miles out of Kondoa town, on the Kondoa to Iodma main road, and, although he walked round the lake, which is about 1 mile long by ½ mile broad, no others were seen.

Mr. W. L. Sclater added the following note in regard to Major Grant's collections, recently received at the Museum:—

Guttera edouardi granti.

The most interesting of the skins recently sent to the Museum by Major C. H. B. Grant are three Crested Guinea-fowls, obtained at Mongoloma, in the Kondoa–Irangi district

of Tanganyika Territory, on September 17 of last year. These are undoubtedly identical with *Numida granti* Elliot, Proc. Zool. Soc. 1871, p. 584, a coloured figure of which was subsequently published by the same writer in his magnificent 'Monograph of the Pheasants' (vol. ii. pl. 43). Elliot's description was founded on a sketch only, of a Guineafowl shot (and eaten) by Colonel J. A. Grant on December 8, 1860, in the "forest of Ugogo, 6½° S. lat., 35½° E. long.," when he was on his adventurous journey to the central parts of Africa.

The special character distinguishing this race is the red on the face and throat shown in, perhaps, a rather exaggerated manner in the plate of Smit, and which is obvious in the three examples sent by Major Claude Grant. This distinguishes it at once from the South African race *Guttera edouardi edouardi*, in which the face and throat are dark; while in *G. e. sethsmithi*, from Uganda, the blue spots of the plumage are much brighter and more conspicuous.

Neumann (Bull. B. O. C. xxiii. 1908, p. 14) described from Lindi, in southern Tanganyika Territory, *Guttera suahelica*. I think it is most probably identical with *G. e. granti*, but this point cannot be settled without comparison with the type.

Mr. David Bannerman forwarded the description of a new race of *Sheppardia* (*Vibrissosylvia* olim.) from Sierra Leone, which he proposed to name

Sheppardia cyornithopsis houghtoni, subsp. nov.

Adult male. Similar to *S. cyornithopsis cyornithopsis* from Cameroon, but the yellowish-rufous of the throat, breast, flanks, and under tail-coverts decidedly darker, and the amount of white on the belly reduced.

Bill (from feathers) 11, wing 75, tail 57, tarsus 25 mm.

Type in the British Museum, ♂ ad., Sugarloaf Forest, near Freetown, Sierra Leone. Collected by Lt.-Col. G. J. Houghton, R.A.M.C. (retired). Brit. Mus. Reg. no. 1931.6.7.1.

Range.—Forests of the Peninsula, Sierra Leone.

Remarks.—The specimen described above is the first example of this species to have been obtained west of Cameroon;

it is not surprising, therefore, that it should prove to be distinct. The other races of *S. cyornithopsis* are known from the Belgian Congo and from the forests of Kenya and Uganda. *S. c. houghtoni* is the first subspecies to have been found in Upper Guinea; the skin has lain for many years in Colonel Houghton's collection, which has only recently come into the possession of the British Museum. I have much pleasure in naming this bird in his honour.

Mr. Gregory M. Mathews sent the following description of a new race of the Pectoral Rail :—

Hypotænidia philippensis norfolkensis, subsp. nov.

Differs from *H. p. australis* Pelzeln in having a distinctly whiter chin; lower throat clearer grey; wing and rump lighter olive. From *H. p. assimilis* (Gray) it differs in having the nape more conspicuously red and in being more heavily spotted on the neck. Measurements as in *H. p. australis*.

Type in Tring Museum, ♂ adult; Burnt Pine on Norfolk Island, May 13, 1913, Roy Bell Collection, no. 1196.

Remarks.—One of 15 specimens.

Mr. H. M. Wallis exhibited a nest of the Purple Sunbird (*Leptocoma asiatica asiatica*).

Corrigenda to Volume LI.

P. 13, line 9, for *Larus ribidundus ribidundus* read *L. ridibundus ridibundus.*

P. 13, line 2 from bottom of page, for *Ereunetus pusillus pusillus* read *Ereunetes pusillus pusillus.*

P. 14, line 13, for *Sitta carolensis carolensis* read *Sitta carolinensis carolinensis.*

P. 45, line 20, for *Lymnocryptes minima* read *Lymnocryptes minimus.*

P. 60, line 26, for *Anthus petrosus littoralis* read *Anthus spinoletta littoralis.*

P. 86, line 8, for *Pluvialus apricarius* read *Pluvialis apricarius.*

P. 114, line 24, for *Lulula arborea* read *Lullula arborea.*

NOTICES.

The next Meeting of the Club will be held on Wednesday, October 14, 1931, at PAGANI'S RESTAURANT, 42–48 Great Portland Street, W. 1. The Dinner at 7 p.m.

Members intending to dine are requested to inform the Hon. Secretary, Mr. C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7.

ANNUAL GENERAL MEETING.

This will also be held at PAGANI'S RESTAURANT on Wednesday, October 14, 1931, at 5.45 p.m. An agenda and balance sheet will be issued in September.

Members who intend to make any communication at the next Meeting of the Club should give notice beforehand to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1, and give him their MSS. for publication in the 'Bulletin' not later than at the Meeting.

INDEX.

[Names of new species and subspecies are indicated by clarendon type under the generic entry only.]

aalge albionis, Uria, 79.
——, *Uria aalge*, 79.
aberr., *Columba livia*, 116.
Acanthopneuste nitidus nitidus, 23.
Accipiter badius sphenurus, 123.
—— *velox*, 15.
acuta tzitzihoa, Anas, 15.
admiralis, Cisticola emini, 50.
Æchmophorus occidentalis, 15.
æneus, Quiscalus quiscula, 13.
æqnatorialis, Stigmatopelia senegalensis, 115.
æruginosus, Circus, 122.
Æthocorys personata intensa, subsp. nov., 100.
—— —— *personata*, 100.
afer, Ptilostomus, 123.
affinis, Nyroca, 15.
africana henrici, Mirafra, 47.
Agelaius phœniceus, 14.
Alauda arvensis, 73.
alba, Crocethia, 13.
——, *Egretta alba*, 79.
albellus, Mergellus, 44, 59, 73.
albeola, Bucephala, 15.
albicilla, Siphia parva, 23.
albifrons guineæ, Sterna, 70.
—— *novella, Sterna*, 70, 71.
—— *saundersi, Sterna*, 70.
——, *Sterna albifrons*, 70.
albionis, Uria aalge, 79.
alcyon, Ceryle, 14.
Alectoris græca cypriotes, 120.
—— —— *sinaica*, 121.
aleuticus, Ptychoramphus, 73.
almoræ, Sitta castaneoventris, 27.
alpestris bicornis, Eremophila, 122.
—— *bilopha, Eremophila*, 122.
alpina, Calidris, 87.
——, *Erolia*, 6.
Alseonax latirostris poonensis, 23.
alticola, Apalis, 109.
aluco obscurata, Strix, 71, 117.
—— *willkouskii, Strix*, 117.
amani, Dioptrornis fischeri, 112.
americana, Anas (*Mareca*), 99.
——, *Mareca*, 108.
——, *Nyroca*, 15.
americanus, Mergus merganser, 15.
Ammomanes, 73.
—— *deserti coxi*, 122.
Ammoperdix heyi, 121.
amoyensis, Caprimulgus monticolus, 102, 103.
Anas acuta tzitzihoa, 15.
—— (*Mareca*) *americana*, 99.
—— *platyrhynchos*, 15, 81.
—— *querquedula*, 127.
—— *strepera*, 15.
Andropadus curvirostris, 52.
—— —— **leoninus**, subsp. nov., 52.
—— *latirostris*, 52.
angolensis arcticincta, Hirundo, 127.
——, *Hirundo angolensis*, 56, 126, 127.
Anthus, 114.
—— *cameroonensis*, 48.
—— *lynesi*, 48.
—— *obscurus*, 60.
—— *petrosus*, 60.
—— —— *littoralis*, 60, 129.
—— **richardi bannermani**, subsp. nov., 48.
—— *sordidus captus*, 121.
—— *spinoletta kleinschmidti*, 60.
—— —— *littoralis*, 60, 129.
antiquus, Synthliboramphus, 72.
Apalis, 110.
—— *alticola*, 109.
—— *chirindensis*, 109.
—— **moreaui**, sp. nov., 109.
Apaloderma narina brachyurum, 80.

Apaloderma narina littoralis, subsp. nov., 80.
—— —— *narina*, 80.
apoda, Paradisea, 9.
apricarius, Pluvialis, 86, 129.
Aquila chrysaëtos chrysaëtos, 79.
arborea, Lullula, 114, 129.
Archilochus colubris, 14.
arctica grabæ, Fratercula, 13, 79.
arcticincta, Hirundo angolensis, 127.
ardens, Oriolus, 46.
ardeola, Dromas, 8.
Arenaria interpres, 8.
argentatus, Larus argentatus, 13.
—— *michahellesii, Larus*, 123.
—— *smithsonianus, Larus*, 13.
Arquatella, 26.
arquatrix, Columba, 123.
—— var. *thomensis, Columba*, 123.
arvensis, Alauda, 73.
asiatica, Leptocoma asiatica, 129.
assimilis, Hypotænidia philippensis, 129.
astrild kempi, Estrilda, 54.
—— *occidentalis, Estrilda*, 54.
ater, Molothras, 14.
atlantis, Columba livia, 116.
aucheri, Lanius excubitor, 121.
aucklandica, Cœnocorypha aucklandica, 97.
audouinii, Larus, 122.
Auklet, Cassin's, 73.
——, Rhinoceros, 72.
aurifrons, Chloropsis aurifrons, 22.
auritus, Podiceps, 44.
australis, Choriotis australis, 99.
——, *Hypotænidea philippensis*, 129.
Avocet, 79.
avosetta, Recurvirostra, 79.
axillaris, Pachycephalopsis hattamensis, 59.

badius sphenurus, Accipiter, 123.
bannermani, Anthus richardi, 48.
bansoensis, Ptyonoprogne obsoleta, 49.
Barbet, Little Green, 16.
bassana, Sula, 13.
Bee-eater, Blue-tailed, 22.
bengalensis javanicus, Centropus, 47.
——, *Molpastes hæmorrhous*, 47.
bewickii, Cygnus, 79, 81.
biarmicus? tanypterus, Falco, 120.
bicornis, Eremophila alpestris, 122.
biddulphi, Podoces, 61.
bilopha, Eremophila alpestris, 122.
birwæ, Ptyonoprogne obsoleta, 48.
Bittern, 122.
Blackbird, Red-shoulder, 14.
Black Cock, 43.
Blackgrouse, 117.
Bluebird, 14.
borealis, Puffinus kuhlii, 13, 16.
bornuensis, Streptopelia roseogrisea, 115.
boweni, Glareola pratincola, 28.
Bower-Bird, Collared, 9.
brachydactyla, Calandrella, 73.
Brachyramphus marmoratus, 72.
brachyrhynchos, Corvus, 14, 15.
brachyura, Pitta, 21, 22, 23, 25.
brachyurum, Apaloderma narina, 80.
Branta leucopsis, 79.
braziliensis, Capella braziliensis, 95.
brunnea, Larvivora, 23.
Bucephala albeola, 15.
—— *clangula clangula*, 44.
Bulbul, Green, 22, 23.
——, Red-vented, 47.
Bullfinch, 47.
——, British, 114.
Bunting, 9.
——, Greenland Snow-, 112.
——, Little, 71.
——, Snow-, 112, 126.
burmanicus, Caprimulgus monticolus, 102, 103.
Bustard, Australian, 99.
——, Great, 99.
Buteo rufinus subsp., 120.
butleri, Strix, 121.

Cacomantis merulinus passerinus, 23.
calandra, Melanocorypha, 73.
Calandrella, 73.
—— *brachydactyla*, 73.
californicus, Lophortyx californicus, 15.
Calidris, 26, 27.
—— *alpina*, 87.
—— —— *sakhalina*, 14.
—— *canutus*, 5.
—— *minutilla*, 14.
cameroonensis, Anthus, 48.
Canary, Senegal Yellow-fronted, 99.
caniceps, Serinus mozambicus, 99.
canus, Larus canus, 13.
Canutus, 26.
canutus, Calidris, 5.
Capella, 93, 95.
—— *braziliensis braziliensis*, 95.
—— *gallinago*, 7.
—— —— *gallinago*, 90, 94, 95, 96.
—— —— *delicata*, 94, 95.
—— *hardwickii hardwickii*, 95.
—— *media*, 96, 97.
—— *megala*, 95.
—— *nigripennis*, 95.
—— *nobilis*, 95.
—— *solitaria*, 95.
—— *stenura*, 22, 94, 96.

capensis vallombrosæ, Pycnonotus, 120.
Caprimulgus monticolus, 100, 101.
—— —— **amoyensis**, subsp. nov., 102, 103.
—— —— **burmanicus**, subsp. nov., 102, 103.
—— —— *monticolus*, 101, 103.
—— —— *stictomus*, 101, 102, 103.
—— *stictomus*, 102.
captus, Anthus sordidus, 121.
Carduelis carduelis niedecki, 120.
carduelis niedecki, Carduelis, 120.
carolinensis, Pandion haliætus, 15.
——, *Sitta carolinensis*, 14, 29, 129.
caspica, Motacilla cinerea, 21.
castanea, Sitta, 27.
castaneoventris almoræ, Sitta, 27.
—— *cinnamoventris, Sitta*, 27.
Catharacta skua, 74, 104.
Centropus bengalensis javanicus, 47.
Ceophlœus pileatus, 47.
cephaëlis, Cinnyris (*Cyanomitra*) *olivaceus*, 52.
Cercomela, 121.
Cerorhinca monocerata, 72.
Ceryle alcyon, 14.
ceylonensis, Upupa epops, 22.
Charadrius hiaticula hiaticula, 85.
—— *melodus*, 85.
—— *semipalmatus*, 13, 15.
—— *vociferus*, 85.
—— —— *vociferus*, 15.
Chat, 120.
——, Indian Blue, 23.
chirindensis, Apalis, 109.
Chlamydera nuchalis, 9.
chloropetoides, Thamnornis, 56, 70, 82.
Chlorophoneus, 111.
—— *melamprosopus*, 111.
—— *multicolor*, 111.
—— **nigrescens**, sp. nov., 110.
—— *nigrifrons*, 110, 111.
—— *nigrithorax*, 111.
—— *rubiginosus*, 110, 111.
Chloropsis aurifrons aurifrons, 22.
chloropus, Tringa, 23.
Choriotis australis australis, 99.
Chough, Ground-, Biddulph's, 61.
chrysaëtos, Aquila chrysaëtos, 79.
Chrysolophus pictus, 47.
—— —— mut. *obscurus*, 46.
Chukor, 120, 121.
Ciconia ciconia ciconia, 79.
cinerea caspica, Motacilla, 21.
——, *Terekia*, 7.
cinnamoventris, Sitta castaneoventris, 27.
Cinnyris cyanolæmus, 53.
—— —— **magnirostratus**, subsp. nov., 53.
Cinnyris (Cyanomitra) olivaceus cephaëlis, subsp. nov., 52.
—— *obscurus guineensis*, 53.
—— *olivaceus obscurus*, 52, 53.
—— *osea*, 121.
Circaëtus gallicus, 120.
Circus æruginosus, 122.
cirrocephalus, Larus, 56.
—— *phæocephalus, Hydrocolœus*, 56.
Cisticola, 33, 36, 41, 50.
—— *emini*, 50.
—— —— **admiralis**, subsp. nov., 50.
—— *petrophila*, 50, 51.
clangula, Bucephala clangula, 44.
clypeata, Spatula, 44.
Cœnocorypha aucklandica aucklandica, 97.
colchicus, Phasianus, 46.
Colius striatus, 40.
colubris, Archilochus, 14.
Columba arquatrix, 123.
—— —— var. *thomensis*, 123.
—— *livia* aberr., 116.
—— —— **atlantis**, subsp. nov., 116.
—— —— *livia*, 116.
—— —— subsp., 116.
—— —— var., 116.
Colymbus immer immer, 44.
Comatibis, 122.
connectens, Junco hyemalis, 15.
Coot, 74.
Coracina, 68.
Coracinus, 68.
corax laurencei, Corvus, 120.
—— *ruficollis, Corvus*, 121.
Cormorant, 18.
——, Pygmy, 122.
coromandelicus, Cursorius, 8.
Corvus brachyrhynchos, 14, 15.
—— *corax laurencei*, 120.
—— —— *ruficollis*, 121.
—— *rhipidurus*, 121.
coryphæa jacksoni, Viridibucco, 16.
Cosmetornis vexillaris, 125.
Courser, Indian, 8.
Cowbird, 14.
coxi, Ammomanes deserti, 122.
Crake, Banded, 24.
crepitans, Grus, 68.
criniger, Gallicolumba, 47.
cristata, Galerida, 73.
cristatus, Lanius cristatus, 22.
——, *Podiceps cristatus*, 44, 108.
Crocethia alba, 13.
Crossbill, Common, 106.
Crow, American, 14, 15.
——, Hooded, 121.
——, Paradise-, 9.

Crow, Paradise-, Obi Island, 9.
Cuckoo, 9, 47.
——, Indian Plaintive, 23.
——, Small, 23.
Cuckoo-Hawk, Common, 23.
cucullatus, Ploceus, 123.
Cuculus poliocephalus poliocephalus, 23.
Curlew, Stone-, 121.
Cursorius, 8.
—— *coromandelicus*, 8.
curvirostra, Loxia curvirostra, 106.
curvirostris, Andropadus, 52.
—— *leoninus, Andropadus*, 52.
cyanolæmus, Cinnyris, 53.
—— *magnirostratus, Cinnyris*, 53.
(Cyanomitra) Cinnyris olivaceus cephaëlis, subsp. nov., 52.
Cygnus, bewickii, 79, 81.
—— *olor*, 81.
cyornithopsis houghtoni, Sheppardia, 128.
——, *Sheppardia cyornithopsis*, 128.
cypriaca, Œnanthe leucomela, 120.
cypriotes, Alectoris græca, 120.

daurica disjuncta, Hirundo, 49.
—— *rufula, Hirundo*, 120.
decaocto, Streptopelia, 121.
delawarensis, Larus, 14.
delicata, Capella gallinago, 94, 95.
Dendrocitta formosæ himalayensis, 17.
—— —— **sarkari,** subsp. nov., 17.
—— *rufa pallida*, 17.
—— —— **vernayi,** subsp. nov., 17.
Dendronanthus indicus, 23.
deserti coxi, Ammomanes, 122.
Dioptrornis fischeri amani, subsp. nov., 112.
—— —— *fischeri*, 112.
disjuncta, Hirundo daurica, 49.
Diver, Great Northern, 44, 45.
domesticus, Passer, 14.
domicella, Hirundo domicella, 49.
—— *kumboensis, Hirundo*, 49.
Dove, Laughing-, 114, 120.
——, Rosy-grey, 114.
romas ardeola, 8.
Dromœcercus seebohmi, 46.
Drongo, 22, 23.
Duck, Buffel-headed, 15.
——, Canvas-back, 15.
——, Tufted, 81.
Dunlin, 26, 27, 87, 88.
——, American, 14.

Eagle, Golden, 79.
——, Hawk-, 81.
Eagle, Short-toed, 120.
eburnea, Pagophila, 8.
edouardi granti, Guttera, 127.
——, *Guttera edouardi*, 128.
—— *sethsmithi, Guttera*, 128.
Egret, Little, 122.
Egretta alba alba, 79.
Eider, Northern, 114.
elaeica, Hippolais pallida, 122.
Emberiza, 9, 113.
—— *pusilla*, 71.
—— *sordida*, 71.
—— *spodocephala melanops*, 71.
—— —— *sordida*, 71.
emini admiralis, Cisticola, 50.
——, *Cisticola*, 50.
enderbyi, Myiomoira macrocephala, 29.
epops ceylonensis, Upupa, 22.
Eremophila alpestris bicornis, 122.
—— —— *bilopha*, 122.
Ereunetes pusillus pusillus, 13, 129.
erithacus, Psittacus, 47.
erlangeri, Glareola pratincola, 28.
Erolia, 6, 7, 8, 26.
—— *alpina*, 6.
—— *maritima*, 6.
—— *minuta*, 6.
—— *minutilla*, 6.
—— *temmincki*, 6.
erythrocephalus, Melanerpes, 14.
erythropus, Tringa, 7, 8.
Erythrospiza, 122.
Estrilda astrild kempi, subsp. nov., 54.
—— —— *occidentalis*, 54.
excubitor aucheri, Lanius, 121.
extrema, Malacocincla rufipennis, 49.
exustus, Pterocles, 8.

falcinellus, Limicola, 7.
Falco biarmicus? *tanypterus*, 120.
—— *peregrinus*, 105.
—— —— *pealei*, 72.
—— *sparverius*, 15.
Falcon, 122.
——, Peale's, 72.
——, Peregrine, 105, 106.
ferina, Fuligula, 25.
fischeri amani, Dioptrornis, 112.
——, *Dioptrornis fischeri*, 112.
flavipes, Tringa, 11, 14, 72, 90.
Flycatcher, Brown, 23.
——, Eastern Red-breasted, 23.
——, Indian Paradise, 23.
——, Indian Red-breasted, 23.
——, Red-breasted, 25.
formosæ himalayensis, Dendrocitta, 17.
—— *sarkari, Dendrocitta*, 17.

Francolin, 104,
Fratercula arctica grabæ, 13, 79.
fulicarius, Phalaropus, 6, 7, 14.
Fuligula ferina, 25.
fuligula, Nyroca, 81.
fulvus, Gyps, 122.
fuscus graellsii, Larus, 13.

Gadwall, 15.
Galerida cristata, 73.
Gallicolumba criniger, 47.
gallicus, Circaëtus, 120.
gallinago, Capella, 7.
——, —— *gallinago*, 90, 94, 95, 96.
—— *delicata, Capella*, 94, 95.
Gannet, 13, 16.
Garganey, 127.
Glareola pratincola boweni, subsp. nov., 28.
—— —— *erlangeri*, 28.
—— —— *limbata*, 28.
—— —— *pratincola*, 28.
glareola, Tringa, 7, 8, 23.
Godwit, Black-tailed, 90.
Golden-eye, 44.
Goosander, 44.
——, American, 15.
Goose, White-fronted, 105.
grabæ, Fratercula arctica, 13, 79.
gracilis palestinæ, Prinia, 121.
Grackle, Bronzed, 13.
——, Tristram's, 121.
græca cypriotes, Alectoris, 120.
—— *sinaica, Alectoris*, 121.
graellsii, Larus fuscus, 13.
granti, Guttera edouardi, 127.
——, *Numida*, 128.
——, *Ptiloprora plumbea*, 59.
Graucalus, 68.
gravis, Puffinus, 13, 16.
Grebe, Black-necked, 44, 45.
——, Great-crested, 44, 108, 109.
——, Little, 44.
——, Red-necked, 44, 45.
——, Slavonian, 44, 45.
——, Western, 15.
Greenshank, 7, 10, 45, 90.
Grey Hen, 43.
griseigena, Podiceps griseigena, 44.
Grouse, 43.
——, Red-, 117.
——, Sand-, 72.
Grus, 68.
—— *crepitans*, 68.
Guillemot, 79.
guineæ, Sterna albifrons, 70.
Guinea-fowl, Crested, 127.
guineensis, Cinnyris obscurus, 53.
Gull, 13.
——, American, 13.
Gull, Black-headed, 104.
——, Bonaparte's, 11, 14.
——, Grey-headed, 56, 57.
——, Herring-, 14.
——, Ivory, 8.
——, Kittiwake, 13.
——, Lesser Black-backed, 13.
——, Ring-billed, 14.
Guttera edouardi edouardi, 128.
—— —— *granti*, 127.
—— —— *sethsmithi*, 128.
—— *suahelica*, 128.
Gymnogenys typicus pectoralis, 123.
Gyps fulvus, 122.

Hæmatopus ostralegus, 87.
haliætus carolinensis, Pandion, 15.
——, *Pandion haliætus*, 78.
hardwickii, Capella hardwickii, 95.
Harrier, Marsh-, 122.
Hartertula, 46.
hattamensis axillaris, Pachycephalopsis, 59.
Hawk, Fish-, 15.
——, Sharp-shinned, 15.
Hawk-Cuckoo, Common, 23.
henrici, Mirafra africana, 47.
Heron, Buff-backed, 122.
——, White, 79.
heyi, Ammoperdix, 121.
hiaticula, Charadrius hiaticula, 85.
Hierococcyx varius, 23.
himalayensis, Dendrocitta formosæ, 17.
Himantopus himantopus, 8.
—— —— *himantopus*, 79.
Hippolais pallida elaeica, 122.
Hirundo angolensis angolensis, 56, 126, 127.
—— —— *arcticincta*, 127.
—— **daurica disjuncta**, subsp. nov., 49.
—— —— *rufula*, 120.
—— *domicella domicella*, 49.
—— —— *kumboensis*, 49.
—— *rustica rustica*, 127.
—— —— *transitiva*, 120.
—— *smithii smithii*, 127.
hirundo, Sterna hirundo, 13, 14.
hispanica melanoleuca, Œnanthe, 120.
hispaniolensis transcaspicus, Passer, 121.
hæmorrhous bengalensis, Molpastes, 47.
Hoopoe, 22.
houghtoni, Sheppardia cyornithopsis, 128.
Humming-bird, Ruby-throated, 14.
Hydrocoloeus cirrocephalus phæocephalus, 56.

hyemalis connectens, Junco, 15.
hypoleucos, Tringa, 7, 21, 89.
Hypotænidia philippensis assimilis, 129.
—— —— *australis*, 129.
—— —— **norfolkensis**, subsp. nov., 129.

Illadopsis, 50.
immer, Colymbus immer, 44.
incana, Tringa, 72.
indicus, Dendronanthus, 23.
——, *Lobivanellus indicus*, 22.
infuscatus, Pternistis leucoscepus, 103, 104.
insulæ, Plectrophenax nivalis, 113, 126.
intensa, Æthocorys personata, 100.
interpres, Arenaria, 8.

Jackdaw, 62, 122.
Jack-Snipe, 96.
jacksoni, Viridibucco coryphæa, 16.
javanicus, Centropus bengalensis, 47.
——, *Merops superciliosus*, 22.
Junco hyemalis connectens, 15.
Juncos, 15.

kempi, Estrilda astrild, 54.
keraudrenii, Phonygammus keraudrenii, 9.
Kestrel, 121, 122.
——, Common, 120.
——, Lesser, 120.
Kingfisher, Belted, 14.
Kite, 72, 78.
Kittiwake, 13.
kleinschmidti, Anthus spinoletta, 60.
Knot, 5, 6, 26, 27.
kuhlii borealis, Puffinus, 13, 16.
kumboensis, Hirundo domicella, 49.
kurræ, Mirafra, 47, 48.

Lagopus mutus reinhardti, 114.
—— *scoticus*, 42, 117.
Lammergeyer, 45.
Lanius cristatus cristatus, 22.
—— *excubitor aucheri*, 121.
—— *nubicus*, 122.
Lanner, 120.
Lapwing, 62, 86.
——, Red-wattled, 22.
Lark, 100.
——, Calandra, 73.
——, Crested, 73.
——, Rufous-naped, 47.
——, Short-toed, 73.
Lark, Sky-, 73.
——, Wood-, 114.
Larus audouinii, 122.
—— *argentatus argentatus*, 13.
—— —— *michahellesii*, 123.
—— —— *smithsonianus*, 13, 14.
—— *canus canus*, 13.
—— *cirrocephalus*, 56.
—— *delawarensis*, 14.
—— *fuscus graellsii*, 13.
—— *marinus*, 13.
—— *philadelphia*, 11, 14.
—— *ridibundis ridibundis*, 13, 104, 129.
Larvivora brunnea, 23.
latirostris, Andropadus, 52.
—— *poonensis, Alseonax*, 23.
laurencei, Corvus corax, 120.
leoninus, Andropadus curvirostris, 52.
leontica, Prinia, 51.
Leptocoma asiatica asiatica, 129.
Leucochila, 66, 67, 69.
Leucochilus, 66, 67, 69.
leucomela cypriaca, Œnanthe, 120.
leucopareia, Trugon terrestris, 69.
leucopsis, Branta, 79.
leucorodia, Platalea leucorodia, 79, 80.
leucoscepus infuscatus, Pternistis, 103, 104.
limbata, Glareola pratincola, 28.
Limicola, 7.
—— *falcinellus*, 7.
Limnaëtops, 81.
Limosa limosa, 90.
littoralis, Anthus petrosus, 60, 129.
——, —— *spinoletta*, 60, 129.
——, *Apaloderma narina*, 80.
livia aberr., *Columba*, 116.
—— *atlantis, Columba*, 116.
——, *Columba livia*, 116.
—— subsp., *Columba*, 116.
—— var., *Columba*, 116.
lobatus, Phalaropus, 6, 7, 13, 16, 87.
Lobivanellus indicus indicus, 22.
longipennis, Macrodipteryx, 124, 125.
Lophortyx californicus californicus, 15.
Loxia curvirostra curvirostra, 106.
lugens, Œnanthe lugens, 120.
Lullula, 73.
—— *arborea*, 114, 129.
Lycocorax pyrrhopterus obiensis, 9.
—— —— *pyrrhopterus*, 9.
Lymnocryptes minimus, 45, 96, 130.
lynesi, Anthus, 48.

macrocephala enderbyi, Myiomoira, 29.
——, *Myiomoira macrocephala*, 29.

Macrodipteryx, 124, 125.
—— *longipennis*, 124, 125.
—— *sperlingi*, 125, 126.
macularia, Tringa, 7, 13, 89.
magnirostratus, Cinnyris cyanolæmus, 53.
major newtoni, Parus, 25.
Malacocincla, 50.
—— **rufipennis extrema**, subsp. nov., 49.
—— —— *rufipennis*, 49, 50.
Mallard, 15, 44, 81.
Mareca americana, 108.
(*Mareca*) *americana, Anas*, 99.
marinus, Larus, 13.
maritima, Erolia, 6.
marmoratus, Brachyramphus, 72.
Martin, Purple, 14.
mayri, Trugon terrestris, 69.
media, Capella, 96, 97.
megala, Capella, 95.
melamprosopus, Chlorophoneus, 111.
Melanerpes erythrocephalus, 14.
melanocephalus momus, Sylvia, 120.
Melanocorypha calandra, 73.
melanoleuca, Œnanthe hispanica, 120.
——, *Tringa*, 9, 10, 11, 14, 72.
melanops, Emberiza spodocephala, 71.
mellianus, Oriolus, 46.
melodus, Charadrius, 85.
merganser americanus, Mergus, 15.
——, *Mergus merganser*, 44.
Mergellus albellus, 44, 59, 73.
Mergus merganser americanus, 15.
—— —— *merganser*, 44.
Merops superciliosus javanicus, 22.
merulinus passerinus, Cacomantis, 23.
michahellesii, Larus argentatus, 123.
migratorius, Planesticus, 14.
Milvus milvus milvus, 78.
minimus, Lymnocryptes, 45, 96, 129.
minor, Philohela, 98.
minuta, Erolia, 6.
minutilla, Calidris, 14.
—— *Erolia*, 6.
Mirafra africana henrici, subsp. nov., 47.
—— *kurræ*, 47, 48.
—— *stresemanni*, 47, 48.
moesta, Œnanthe, 122.
Molothrus ater, 14.
Molpastes hæmorrhous bengalensis, 47.
momus, Sylvia melanocephalus, 120.
monachus, Necrosyrtes monachus, 123.
monocerata, Cerorhinca, 72.
monticola, Nesillas typica, 56.
Monticola solitarius, 120.
monticolus amoyensis, Caprimulgus, 102, 103.
—— *burmanicus, Caprimulgus*, 102, 103.
monticolus, Caprimulgus, 100, 101.
——, —— *monticolus*, 101, 103.
—— *stictomus, Caprimulgus*, 101, 102, 103.
moreaui, Apalis, 109.
Motacilla cinerea caspica, 21.
mozambicus caniceps, Serinus, 99.
multicolor, Chlorophoneus, 111.
Murrelet, Ancient, 72.
——, Marbled, 72.
mutus reinhardti, Lagopus, 114.
Myiomoira macrocephala enderbyi, subsp. nov., 29.
—— *macrocephala macrocephala*, 29.

narina, Apaloderma narina, 80.
—— *littoralis Apaloderma*, 80.
nebularia, Tringa, 7, 8, 10, 11, 44, 90.
nebularum, Saxicola torquata, 51.
Necrosyrtes monachus monachus, 123.
Neophron percnopterus, 120, 122.
Nesillas typica, 70.
—— —— **monticola**, subsp. nov., 56.
—— —— *typica*, 56.
newtoni, Parus major, 25.
niedecki, Carduelis carduelis, 120.
Nightingale, 121.
Nightjar, 125.
——, Indian, 100.
——, Pennant-wing, 125.
——, Standard-wing, 124, 125.
nigrescens, Chlorophoneus, 110.
nigricollis, Podiceps nigricollis, 44.
nigrifrons, Chlorophoneus, 110, 111.
nigripennis, Capella, 95.
nigripes, Phœbastria nigripes, 29.
—— *reischekia, Phœbastria*, 29.
nigrithorax, Chlorophoneus, 111.
nipalensis, Nisaëtus, 81.
Nisaëtus, 81.
—— *nipalensis*, 81.
nitidus, Acanthopneuste nitidus, 23.
nivalis insulæ, Plectrophenax, 113, 126.
——, *Plectrophenax*, 112.
—— *subnivalis, Plectrophenax*, 113, 126.
nobilis, Capella, 95.
Noddy, 41.
norfolkensis, Hypotænidia philippensis, 129.
novella, Sterna albifrons, 70, 71.
nubicus, Lanius, 122.
nuchalis, Chlamydera, 9.
Numida granti, 128.
Nuthatch, 14, 27.
Nyroca affinis, 15.
—— *americana*, 15.

Nyroca fuligula, 81.
—— *valisineria*, 15.

obiensis, Lycocorax pyrrhopterus, 9.
obscurata, Strix aluco, 71, 117.
obscurus, Anthus, 60.
——, *Chrysolophus pictus* mut., **46.**
——, *Cinnyris olivaceus*, 52, 53.
—— *guineensis, Cinnyris*, 53.
obsoleta bansoensis, Ptyonoprogne, 49,
—— *birwæ, Ptyonoprogne*, 48.
—— *rufigula, Ptyonoprogne*, 48, 49.
occidentalis, Æchmophorus, 15.
——, *Estrilda astrild*, 54.
ochropus, Tringa, 7.
Œnanthe hispanica melanoleuca, 120.
—— *leucomela cypriaca*, 120.
—— *lugens lugens*, 120.
—— *moesta*, 122.
olivaceus cephaëlis, Cinnyris (*Cyanomitra*), 52.
—— ——, (*Cyanomitra*) *Cinnyris*, 52.
—— *obscurus, Cinnyris*, 52.
oliveri, Phalacrocorax, 18.
olor, Cygnus, 81.
Onychognathus tristramii, 121.
Oriolus ardens, 46.
—— *mellianus*, 46.
osea, Cinnyris, 121.
Osprey, 78.
——, American, 15.
ostralegus, Hæmatopus, 87.
Otis tarda tarda, 99.
Owl, 121, 122.
——, African Scops, 40.
——, Little, 120.
——, Scops, 120.
——, Tawny, 71, 117.
Oyster-catcher, 87.

Pachycephalopsis hattamensis axillaris, subsp. nov., 59.
Pagophila eburnea, 8.
palestinæ, Prinia gracilis, 121.
pallida, Dendrocitta rufa, 17.
—— *elaeica Hippolais*, 122.
Pandion haliætus carolinensis, 15.
—— —— *haliætus*, 78.
Paradisea apoda, 9.
paradisi, Terpsiphone paradisi, 23.
parasiticus, Stercorarius, 105.
Parrot, Grey, 47.
Parus major newtoni, 25.
parva albicilla, Siphia, 23.
Passer domesticus, 14.
—— *hispaniolensis transcaspicus*, 121.
passerina, Spizella, 16.
passerinus, Cacomantis merulinus, 23.
pealei, Falco peregrinus, 72.
pectoralis, Gymnogenys typicus, 123.
Pelidna, 26.
percnopterus, Neophron, 120, 122.
peregrinus, Falco, 105.
—— *pealei, Falco*, 72.
Pericrocotus, 35.
personata, Æthocorys personata, 100.
—— *intensa, Æthocorys*, 100.
petrophila, Cisticola, 50, 51.
petrosus, Anthus, 60.
—— *littoralis, Anthus*, 60, 129.
phœocephalus, Hydrocolœus cirrocephalus, 56.
Phalacrocorax, 18.
—— **oliveri**, nom. nov., 18.
Phalarope, 6, 14.
——, Red-necked, 13, 16, 87.
——, Wilson, 15.
Phalaropus, 7.
—— *fulicarius*, 6, 7, 14.
—— *lobatus*, 6, 7, 13, 16, 87.
—— *tricolor*, 15.
Phasianus, 47.
—— *colchicus*, 46.
—— mut. *tenebrosus*, 46.
Pheasant, Common, 47.
philadelphia, Larus, 11, 14.
Philepitta schlegeli, 46.
philippensis assimilis, Hypotænidia, 129.
—— *australis, Hypotænidia*, 129.
—— *norfolkensis, Hypotænidia*, 129.
Philohela minor, 98.
Philomachus, 7.
—— *pugnax*, 7, 88, 126.
Phœbastria nigripes nigripes, 29.
—— **nigripes reischekia**, subsp. nov., 29.
phœniceus, Agelaius, 14.
Phonygammus, 9.
—— *keraudrenii keraudrenii*, 9.
Phylloscopus trochilus trochilus, 26.
Pica, 66.
pictus, Chrysolophus, 47.
—— mut. *obscurus, Chrysolophus*, 46.
Picus, 66.
Pigeon, Domestic, 95, 116.
——, Ground-, 47.
——, Rock-, 115, 116.
——, São Thomé Maroon, 123.
pileata, Pyrrhula pyrrhula, 114.
pileatus, Ceophlœus, 47.
Pintail, 15.
Pipit, Richard's, 48.
——, Rock-, 60, 61.
Pisobia, 26.
Pitta, 23.
—— *brachyura*, 21, 22, 23, 25.
Planesticus migratorius, 14.
Platalea leucorodia leucorodia, 79, 80.
platyrhynchos, Anas, 15, 81.

Plectrophenax nivalis, 112.
—— —— *insulæ*, 113, 126.
—— —— *subnivalis*, 113, 126.
Ploceus cucullatus, 123.
Plover, Crab-, 8.
——, Golden, 22, 86.
——, Killdeer, 15, 85.
——, Piping, 85, 87.
——, Ringed, 85.
——, Semipalmated, 13, 15.
plumbea granti, Ptiloprora, 59.
Pluvialis apricarius, 86, 130.
Pochard, 25.
Podiceps auritus, 44.
—— *cristatus cristatus*, 44, 108.
—— *griseigena griseigena*, 44.
—— *nigricollis nigricollis*, 44.
—— *ruficollis ruficollis*, 44.
Podoces biddulphi, 61.
poliocephalus, Cuculus poliocephalus, 23.
poonensis, Alseonax latirostris, 23.
pratincola boweni, Glareola, 28.
—— *erlangeri, Glareola*, 28.
——, *Glareola pratincola*, 28.
—— *limbata, Glareola*, 28.
Pratincole, Chestnut-winged, 28.
Prinia, 51, 122.
—— *gracilis palestinæ*, 121.
—— **leontica**, sp. nov., 51.
Progne subis, 14.
pseudo-zosterops, Randia, 46.
Psittacus erithacus, 47.
Psophia, 68.
Ptarmigan, 114.
Pternistis leucoscepus infuscatus, 103, 104.
Pterocles, 8.
—— *exustus*, 8.
Ptiloprora plumbea granti, subsp. nov., 59.
Ptilostomus afer, 123.
Ptychoramphus aleuticus, 73.
Ptyonoprogne obsoleta bansoensis, 49.
Ptyonoprogne obsoleta birwæ, subsp. nov., 48.
—— —— *rufigula*, 48, 49.
Puffin, 13, 72, 79.
Puffinus gravis, 13, 16.
—— *kuhlii borealis*, 13, 16.
—— *puffinus puffinus*, 13.
puffinus, Puffinus puffinus, 13.
pugnax Philomachus, 7, 88, 126.
pusilla, Emberiza, 71.
pusillus, Ereunetes pusillus, 13, 129.
Pycnonotus capensis vallombrosæ, 120.
pyrrhopterus, Lycocorax pyrrhopterus, 9.
—— *obiensis, Lycocorax*, 9.
pyrrhula pileata, Pyrrhula, 114.
Pyrrhula pyrrhula, 47.
—— —— *pileata*, 114.

Quail, Californian, 15,
querquedula, Anas, 127.
Quiscalus quiscula æneus, 13
quiscula æneus, Quiscalus, 13.

Rail, Pectoral, 129.
Rallina superciliaris superciliaris, 24.
Randia pseudo-zosterops, 46.
Raven, 120.
——, Brown-necked, 121.
——, Fantail, 121.
Recurvirostra avosetta, 79.
Red-head, 15.
Redshank, 7, 10, 89, 90.
——, Dusky, 7.
reinhardti, Lagopus mutus, 114.
reischekia, Phœbastria nigripes, 29.
Rhamphocorys, 73, 122.
rhipidurus, Corvus, 121.
Rhodopechys, 122.
richardi bannermani, Anthus, 48.
ridibundus, Larus ridibundus, 13, 104, 129.
Rissa tridactyla, tridactyla, 13.
Robin, 14.
Rock-Pigeon, 115, 116.
Rock-Pipit, 60, 61.
Rock-Sparrow, 122.
roseogrisea bornuensis, Streptopelia, 115.
rubiginosus, Chlorophoneus, 110, 111.
rufa pallida, Dendrocitta, 17.
—— *vernayi, Dendrocitta*, 17.
Ruff, 7, 88, 126.
ruficollis, Corvus corax, 121.
——, *Podiceps ruficollis*, 44.
rufigula, Ptyonoprogne obsoleta, 48, 49.
rufinus subsp., *Buteo*, 120.
rufipennis extrema, Malacocincla, 49.
——, *Malacocincla rufipennis*, 49, 50.
rufula, Hirundo daurica, 120.
rufus, Selasphorus, 15.
rustica, Hirundo rustica, 127.
—— *transitiva, Hirundo*, 120.
rusticola, Scolopax, 8, 97, 99.

sakhalina, Calidris alpina, 14.
Sanderling, 6, 7, 13.
Sand-Grouse, 72.
Sandgrouse, Indian, 8.
Sandpiper, Baird's, 27.
——, Bonaparte's, 27.
——, Broad-billed, 7.

Sandpiper, Buff-breasted, 14.
——, Common, 7, 21, 89.
——, Green, 7.
——, Least, 14.
——, Pectoral, 27.
——, Purple, 26, 27.
——, Red-backed, 14.
——, Semipalmated, 13.
——, Spotted, 7, 13, 14, 89.
——, Wood, 7, 23.
Sandpiper, Curlew-, 26, 27.
sarkari, Dendrocitta formosæ, 17.
saundersi, Sterna albifrons, 70.
Saxicola torquata nebularum, subsp. nov., 51.
Scaup, Lesser, 15.
schlegeli, Philepitta, 46.
Scolopax rusticola, 8, 97, 99.
Scoter, Common, 45.
——, Velvet, 45.
scoticus, Lagopus, 42, 117.
Scotocerca, 121.
seebohmi, Dromœcercus, 46.
Selasphorus rufus, 15.
semipalmatus, Charadrius, 13, 15.
senegalensis æquatorialis, Stigmatopelia, 115.
——, *Stigmatopelia senegalensis*, 115.
——, *Streptopelia*, 120.
—— *thomé, Stigmatopelia*, 115.
Serinus mozambicus caniceps, 99.
—— *syriacus*, 122.
sethsmithi, Guttera edouardi, 128.
Shearwater, Greater, 13, 16.
——, North Atlantic, 13, 16.
Sheppardia, 128.
—— *cyornithopsis cyornithopsis*, 128.
—— —— **houghtoni**, subsp. nov., 128.
Shoveler, 44.
Shrike, 21.
——, Brown, 22.
Sialia sialis, 14.
sialis, Sialia, 14.
sinaica, Alectoris græca, 121.
Siphia, 25.
—— *parva albicilla*, 23.
Sitta carolinensis carolinensis, 14, 29, 130.
—— *castanea*, 27.
—— **castaneoventris almoræ**, subsp. nov., 27.
—— —— *cinnamoventris*, 27.
skua, Catharacta, 74, 104.
Skua, Great, 74, 104, 105.
——, Richardson's, 105.
Sky-Lark, 73.
Smew, 44, 59, 60, 73.
smithii, Hirundo smithii, 127.
smithsonianus, Larus argentatus, 13, 14.
Snipe, 7.
——, Auckland Island, 97.
——, Australian, 95.
——, Common, 90, 91.
——, Double, 96.
——, Great, 96.
——, Jack-, 45, 96.
——, Latham's, 95.
——, Pin-tailed, 22, 96.
——, Sabine's, 94.
——, Wilson's, 94, 95.
Snow-Bunting, 112.
solitaria, Capella, 95.
solitarius, Monticola, 120.
sordida, Emberiza, 71.
——, —— *spodocephala*, 71.
sordidus captus, Anthus, 121.
Sparrow, Chipping, 16.
——, House, 14.
——, Moabite, 121.
——, Rock-, 122.
Sparrow-Hawk, American, 15.
sparverius, Falco, 15.
Spatula clypeata, 44.
sperlingi, Macrodipteryx, 125, 126.
sphenurus, Accipiter badius, 123.
spinoletta littoralis, Anthus, 60, 129.
—— *kleinschmidti, Anthus*, 60.
Spizaëtus, 81.
Spizella passerina, 16.
spodocephala melanops, Emberiza, 71.
—— *sordida, Emberiza*, 71.
Spoonbill, 79, 80.
steadi, Stictocarbo, 18.
Steganopus tricolor, 15.
stenura, Capella, 22, 94, 96.
Stercorarius parasiticus, 105.
Sterna albifrons albifrons, 70.
—— —— **guineæ**, subsp. nov., 70.
—— —— *novella*, 70.
—— —— *saundersi*, 70.
—— *hirundo hirundo*, 13, 14.
Stictocarbo steadi, 18.
stictomus, Caprimulgus, 102.
——, —— *monticolus*, 101, 102, 103.
Stigmatopelia senegalensis æquatorialis, 115.
—— —— *senegalensis*, 115.
—— —— **thomé**, subsp. nov., 115.
Stilt, 8, 79.
Stint, 26, 27.
——, American, 14.
Stonechat, 51, 52.
Stork, 121.
——, White, 79.
strepera, Anas, 15.
Streptopelia decaocto, 121.
—— **roseogrisea bornuensis**, subsp. nov., 115.
—— *senegalensis*, 120.
stresemanni, Mirafra, 47, 48.

striatus, Colius, 40.
Strix aluco obscurata, 71, 117.
—— —— *willkouskii*, 117.
—— *butleri*, 121.
—— *uralensis*, 117.
suahelica, Guttera, 128.
subis, Progne, 14.
subnivalis, Plectrophenax nivalis, 113, 126.
subruficollis, Tryngites, 14.
subsp., *Buteo rufinus*, 120.
——, *Columba livia*, 116.
Sula bassana, 13.
Sunbird, 121.
——, Olive, 53.
——, Purple, 129.
superciliosus javanicus, Merops, 22.
superciliaris, Rallina superciliaris, 24.
Swallow, 120.
——, Angolan, 56, 126.
——, European, 127.
——, Red-rumped, 49.
——, Wire-tailed, 127.
Swan, Bewick's 79, 81.
——, Mute, 81.
Swift, Black, 120.
Sylvia melanocephalus momus, 120.
Synthliboramphus antiquus, 72.
syriacus, Serinus, 122.
Syrnium willkouskii, 71.

tanypterus, Falco biarmicus ?, 120.
tarda, Otis tarda, 99.
Tattler, Wandering, 72.
Teal, Common, 127.
temmincki, Erolia, 6.
tenebrosus, Phasianus mut., 46.
Terekia, 7.
—— *cinerea*, 7.
Tern, Common, 14.
——, Little, 70.
——, Noddy, 41.
——, Sooty, 41.
Terpsiphone paradisi paradisi, 23.
terrestris leucopareia, Trugon, 69.
—— *mayri, Trugon*, 69.
——, *Trugon terrestris*, 69.
Tetrao, 43.
—— *tetrix*, 42, 117.
tetrix, Tetrao, 42, 117.
Thamnornis, 46.
—— *chloropetoides*, 56, 70, 82.
thomé, Stigmatopelia senegalensis, 115.
thomensis, Columba arquatrix var., 123.
Thrush, 21.
——, Painted, 21, 22, 23, 25.
——, Rock Blue-, 120.
Tit, Great, 25.
torquata nebularum, Saxicola, 51.
Totanus, 26.
totanus, Tringa, 7, 8, 10, 89.
transcaspicus, Passer hispaniolensis, 121.
transitiva, Hirundo rustica, 120.
Tree-Pie, Indian, 17.
tricolor, Phalaropus, 15.
——, *Steganopus*, 15.
tridactyla, Rissa tridactyla, 13.
Tringa, 8, 26, 89.
—— *chloropus*, 23.
—— *erythropus*, 7, 8.
—— *flavipes*, 11, 14, 72, 90.
—— *glareola*, 7, 8, 23.
—— *hypoleucos*, 7, 21, 89.
—— *incana*, 72.
—— *macularia*, 7, 13, 89.
—— *melanoleuca*, 9, 10, 11, 14, 72.
—— *nebularia*, 7, 8, 10, 11, 44, 90.
—— *ochropus*, 7.
—— *totanus*, 7, 8, 10, 89.
tristramii, Onychognathus, 121.
trochilus, Phylloscopus trochilus, 26.
Trogon, Narina, 80.
Trugon terrestris leocopareia, 69.
—— —— **mayri**, subsp. nov., 69.
—— —— *terrestris*, 69.
Tryngites subruficollis, 14.
Turnix, 35.
Turnstone, 8.
typica monticola, Nesillas, 56.
——, *Nesillas*, 70.
——, —— *typica*, 56.
typicus pectoralis, Gymnogenys, 123.
tzitzihoa, Anas acuta, 15.

Upupa epops ceylonensis, 22.
uralensis, Strix, 117.
Uria aalge aalge, 79.
—— —— *albionis*, 79.

valisineria, Nyroca, 15.
vallombrosæ, Pycnonotus capensis, 120.
Vanellus, 87.
—— *vanellus*, 62, 86.
var., *Columba livia*, 116.
varius, Hierococcyx, 23.
velox, Accipiter, 15.
vernayi, Dendrocitta rufa, 17.
vexillarius, Cosmetornis, 125.
Vibrissosylvia, 128.
Viridibucco coryphæa jacksoni, subsp. nov., 16.
vociferus, Charadrius, 85.
——, —— *vociferus*, 15.
Vulture, Egyptian, 120.
——, Griffon, 122.

Wagtail, Forest-, 23.
——, Grey, 21.

Warbler, 21, 46.
——, Cetti's, 121, 122.
——, Fantail, 33.
——, Grasshopper-, 26.
——, Green Willow , 23.
——, Willow-, 26.
Waterfowl, 41.
Wigeon, American, 99, 108.
wiltkouskii, Strix aluco, 117.
——, *Syrnium*, 71.
Woodcock, 8, 85, 97, 99.
Woodcock, American, 98.
Wood-Lark, 114.
Woodpecker, Black, 47.
——, Red-headed, 14.

Yellow-legs, Greater, 14.
——, Lesser, 14.
Yellowshank, Greater, 9, 12, 72.
——, Lesser, 72, 90.

PRINTED BY TAYLOR AND FRANCIS, RED LION COURT, FLEET STREET.

5/-
1931-32
4
52.